

# Kentucky Medical

Teenage Pregnancy  
in Kentucky  
Page 7

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**H**APPY NEW YEAR! I am looking forward to an exciting Associational new year and I hope you are also. President Hench and the Board of Trustees have developed a plan of action for the year that is well thought out, but yet is flexible enough to meet any unforeseen problems that may arise.

However, a few individuals cannot bring this to a successful fruition by themselves. Each and every one of us must dedicate ourselves to working for our Association and selling to the public and our patients the problem we face with medical liability, if we are to overcome the many problems we face with the liability crisis.

I promise you that your officers, Board, staff and committees will be working long and hard in this endeavor this year. But we need all of you to help.

In 1986, we had an excellent increase in membership. However, there are many of our colleagues who do not belong to the KMA. If each of you would sell KMA in the hospital lounges or other places of contact, we could have a tremendous year. If you don't know who aren't members in your county, we can tell you. Take it upon yourself to be membership chairman in your county, and just keep hammering until you make your county membership 100%.

While I am writing this article, I have learned of the loss of a friend, Tom Heavern, M.D. All of Kentucky medicine lost a good friend with Tom's passing. If each of us would just give of ourselves a small portion of what Tom did, our community, our profession, and our patients would be much better served.

In closing, I want to thank you for electing me President of KMA for 1987-1988. I will do my best to uphold this great honor you have bestowed upon me. Thank you.

**Donald C. Barton, M.D.**  
**KMA President-Elect**

### **P.S.**

The AMA Interim meeting was held in Las Vegas and I learned the secret of how to come back from Vegas with a small fortune. Go with a large fortune.



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# An Analysis of Teenage Out-of-Wedlock Births in Kentucky, 1976–1984

CARL W. SPURLOCK, PH.D., M. WARD HINDS, M.D., M.P.H., JOSEPH W. SKAGGS, D.V.M.,  
M.P.H., GERSHON H. BERGEISEN, M.D. and C. HERNANDEZ, MD., M.P.H.



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*While adolescent fertility rates and the proportion of total live births borne by teenagers are generally declining in Kentucky, the percent of births to unmarried teenagers is increasing at an alarming rate. Over one-third of Kentucky's teenage births are now out-of-wedlock (OOW) and will reach one-half by the mid-1990's if the present rate of increase is continued. We found that substantial regional and racial variations occurred in adolescent OOW birthrates in the State. White teenagers who reside in the Northern Kentucky, Cumberland Valley, Kentucky River and Kentuckiana Regions were at a significantly increased risk of an OOW birth, while nonwhite teenagers in the Kentuckiana Region (specifically Jefferson County) were likewise at an increased risk. Striking racial differences are noted in the higher OOW rates for nonwhites than for whites in all regions (59.2 vs. 12.8/1000 statewide), however data from 1975-1979 compared with the 1980-1984 period, indicate a substantial trend towards race-specific rate convergence. A further comparison of these time periods by regions shows the overall strong increase in the adolescent OOW birthrate not to be uniform throughout Kentucky.*

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**T**eenage pregnancy has become a serious national problem.<sup>1</sup> In a typical year, it is estimated that nearly 1.2 million U.S. teenagers become pregnant: 49% deliver, 38% abort, and 13% have miscarriages or stillbirths.<sup>2</sup> Most of these teenage pregnancies are unintended (74%), and, of particular concern, two-thirds of pregnant teenagers are unmarried.<sup>3</sup>

In Kentucky, teenage out-of-wedlock (OOW) births have reached an alarming level. During the period 1980 through 1984 there was a total of 54,816 live births to teenagers (13 through 19 years of age), of which 19,112 (34.9%) were OOW.<sup>4</sup> Figure 1 shows the dramatic change from a moderate increase (1955 to 1965) to an accelerated increase (1965 to 1984) in percent of teenage live births that are OOW. If this trend continues into the mid-1990's over one-half of Kentucky's teenage live births will be OOW.

There are two major areas of concern related to the increasing rate of OOW live births to teenagers. First is the lasting socioeconomic hardships that are imposed on two generations: the teenage mother and her child. Unmarried teenage mothers are significantly more likely to live below the poverty level than other women with young children.<sup>5</sup> Only half of those who give birth before age 18 complete high school as compared with 96% of those who postpone childbearing.<sup>5</sup> As a result they earn lower incomes and are far more likely to be dependent on welfare. For example, 71% of women under 30 who receive Aid to Families with Dependent Children (AFDC) had their first child as teenagers.<sup>6</sup> The lack of self-sufficiency often is continued as children of teenage parents themselves become teenage parents. In this fashion one generation of welfare dependency is followed by another.

The second area of concern is related directly to the health aspects of teenage maternity. Infants of teenage mothers have higher rates of morbidity and mortality than do infants of older mothers. Especially, a strong link exists between young maternal age and low birth-weight (LBW), the major risk factor for infant morbidity and mortality.<sup>7</sup> Teenage mothers and, in particular, unmarried teenage mothers, have a consistently higher risk of bearing LBW infants than those who are in the age-group of 20 to 35.<sup>8</sup> In the combined years 1982-

83, the mortality rate among Kentucky infants born to teenage mothers was 14.2 per 1000 live births, 30% higher than among infants of mothers over 19 years of age.<sup>9</sup> Additionally, even if death does not result, being born of a teenage mother greatly increases a child's chances of getting a poor start in life due to low birth-weight, prematurity, deficits in cognitive development and, increasingly, child abuse.<sup>10</sup>

If the epidemic of teenage OOW parenthood is to be controlled, strategies designed to interrupt the sequence of steps leading to parenthood need to be developed and implemented. In the present financial environment of scarce resources all strategies cannot be applied to all places. They will have to be limited to those strategies that most directly address the problem where it is most severe. Our objectives are to present and analyze data that may be used in the decision-making process. We are concerned with whether all regions of Kentucky share equally the high teenage OOW rate, as well as whether all regions are experiencing the same dramatic increases in teenage OOW live births. Answers to these questions are prerequisite to developing strategies designed to reverse the present undesirable situation.

### **Data and Methods**

For the regional analyses we used the computerized Kentucky Birth Certificate files for the 10-year period 1975 through 1984 to identify teenage (13-19 years) OOW live births at the county level. All stillbirths were removed, resulting in a total of 81,254 births for the 10-year period. These births were then split into two five-year periods (1975-1979 and 1980-1984) and aggregated to the county, regional and state levels. The rationale for aggregating by the five-year time intervals was to avoid the problem of too many zeros inherent in single-year, county level data and, to provide uniform comprehensive time periods to facilitate comparisons.

These data were further subdivided into three age groups, 13-14, 15-17, and 18-19 years, so that detailed, age-specific analyses could be accomplished. Additionally, they were dichotomized as white or non-white for race-specific analysis. Populations were obtained for all geographic, age-specific, time-specific,



# TEENAGE BIRTHS—Spurlock et al

TABLE 1  
AGE-SPECIFIC FERTILITY RATES FOR KENTUCKY  
TEENAGERS BY AGE AND RACE, 1977-1984

Age	Race	Age-specific fertility rate*							
		1977	1978	1979	1980	1981	1982	1983	1984
13 - 14	WHITE	3.0	3.6	2.9	2.8	3.4	2.5	2.3	2.7
	NONWHITE†	11.6	11.2	10.1	12.9	8.7	8.3	10.7	12.8
	TOTAL	3.7	4.3	3.6	3.6	3.6	3.0	2.9	3.6
15 - 17	WHITE	52.1	50.2	47.6	45.6	44.0	39.0	35.3	37.9
	NONWHITE	83.1	85.9	80.6	77.3	74.0	62.6	51.9	66.4
	TOTAL	55.0	53.5	50.8	48.3	42.8	41.4	36.8	40.3
18 - 19	WHITE	113.5	110.2	111.5	104.1	100.9	90.5	89.4	79.1
	NONWHITE	141.0	128.8	143.2	133.2	115.9	111.7	110.0	96.5
	TOTAL	116.1	112.0	114.6	106.8	102.4	92.4	91.3	80.6

\*Number of live births per 1000 females in respective age and race groups.

†Black and other races.

Table 2  
REGIONAL RISK INDICATORS (RRI) FOR WHITE  
TEENAGE OUT-OF-WEDLOCK (OOW) LIVE BIRTHS,  
ADJUSTED BY AGE, KENTUCKY, 1980-84

Region	Name	RRI	95% Confidence Limits	Rank	OOW Live Births	Rate† (1000)
7	Northern Kentucky	1.35*	1.29-1.42	1	1,648	17.0
13	Cumberland Valley	1.24*	1.17-1.32	2	1,130	15.5
12	Kentucky River	1.22*	1.13-1.32	3	677	15.1
6	Kentuckiana	1.17*	1.13-1.22	4	2,942	15.0
3	Green River	1.04	0.97-1.13	5	739	13.4
5	Lincoln Trail	0.97	0.90-1.04	6	744	12.2
15A	Bluegrass-West	0.92	0.84-1.01	7	474	11.6
14	Lake Cumberland	0.90	0.83-0.98	8	577	11.2
8	Buffalo Trace	0.89	0.76-1.02	9	181	11.1
10	Fiveo	0.89	0.80-0.97	9	466	11.1
2	Pennyrile	0.88	0.81-0.96	11	544	11.2
11	Big Sandy	0.87	0.80-0.94	12	618	10.8
15B	Bluegrass-East	0.79	0.75-0.84	13	1,301	11.1
9	Gateway	0.72	0.63-0.82	14	222	10.0
4	Barren River	0.68	0.62-0.74	15	589	9.2
1	Purchase	0.57	0.52-0.63	16	374	7.7
	TOTAL				13,222	12.8

\*Significantly high.

†Unadjusted rate per 1000 white females age 13-19.

and race-specific categories for rate calculations. The regions used for analysis are Kentucky's 15 Area Development Districts (ADD), with the exception that the large 17 county Bluegrass ADD was split into two regions for a total of 16.

We compared the teenage OOW live birthrates for each region with those of the state by calculating a Regional Risk Indicator (RRI) for each region. The RRI was calculated as,

$$\frac{O_R/P_R}{O_K/P_K} = \text{RRI},$$

where  $O_R$  is the race-specific number of OOW teenage

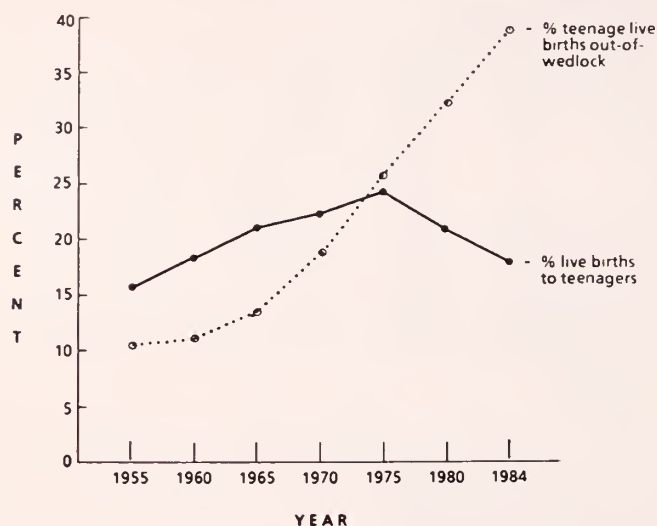
live births for a region,  $P_R$  is the race-specific teenage female population of that region,  $O_K$  is race-specific teenage OOW births in Kentucky and  $P_K$  is the race-specific teenage female population of Kentucky.

We stratified for age according to the three age categories previously mentioned. Such stratification is a method for the removal of potential bias due to differences in age distribution between compared groups. We used a 95% confidence interval to evaluate the statistical significance of the age-adjusted RRI's.<sup>11</sup>

In order to evaluate regional trends in teenage OOW birth rates we compared two five-year periods, 1975-1979 and 1980-1984. The 1975-1979 age- and race-

## TEENAGE BIRTHS—Spurlock et al

FIGURE 1. PERCENT OF TOTAL LIVE BIRTHS TO TEENAGERS AND PERCENT OF TEENAGE LIVE BIRTHS OUT-OF-WEDLOCK, KENTUCKY, 1955-1984



specific OOW birthrates were applied to the three 1980-1984 age-specific population categories to obtain an expected frequency of OOW births in the latter period. Then the expected frequencies were compared to the actual 1980-1984 frequencies by calculating an age-adjusted Rate Ratio (RR) using the Mantel-Haenszel Method.<sup>12</sup> A 95% confidence interval was used to statistically evaluate the difference between the derived RR and unity, which would be the case if the expected frequencies and the actual frequencies were exactly the same.

### Results

Since peaking in 1975, the percentage of Kentucky's live births borne by teenagers has steadily declined (Figure 1). Partially responsible for this decline is the general decrease in teenage fertility for the eight-year period since 1976 (Table 1.) In particular the 18-19 year-old group has shown a decrease of 30.6% in its fertility rate. However, the picture is not as positive for the 13-14 and 15-17 year-old age groups. For example, the 1977 fertility rate for the 13-14 year-olds was 3.7, which is essentially the same as the 1984 rate of 3.6. For nonwhite 13-14 year-olds the rate actually increased from 11.6 to 12.8. Similarly, the 1984 statistics did not bode well for the 15-17 year-old group, reversing the long downward trend with a sharp upturn. The nonwhite and white 15-17 year-old groups increased their rates by 27.9% (51.9 to 66.4), and 7.4% (35.3 to 37.9) respectively from 1983 to 1984. Since females in these age groups are unlikely to be married,

continued impetus is given to the steadily increasing percentage of adolescent OOW maternity (Figure 1).

The risk of a teenager having an OOW live birth is not uniformly distributed throughout the state; instead, significantly high risk is concentrated in only a few regions. As indicated by the age-adjusted Regional Risk Indicator (RRI), relative to the rest of the state, four regions were significantly high for white teenage OOW live births (Table 2) and only one for nonwhite teenagers (Table 3).

For whites, the four regions with significantly elevated RRIs (Northern Kentucky, Cumberland Valley, Kentucky River and Kentuckiana) account for nearly half (48.4%) of the 13,222 OOW live births that occurred to 13-19 year-olds during the 1980-84 period (Table 2). All four of these regions have OOW live birthrates of 15/1000 or greater and stand out as areas needing particular attention.

We further analyzed the situation in the Northern Kentucky Region, because it has a RRI higher than any other region as well as the highest OOW birthrate. Six of the eight counties comprising the Region have OOW birthrates for the aggregated 1980-84 time period much greater than the State average (12.8). Boone and Pendleton Counties are below the State average with rates of 11.5 and 12.0 respectively. The more urbanized counties of Campbell and Kenton not only dominate the absolute number of OOW births (509 to 740) but also have high rates (19.2 and 18.0 respectively). On the other hand, the lesser urbanized counties of Grant (17.2) and Owen (18.1) also had rates much higher than the State average. The adolescent OOW rates in these latter two counties have increased dramatically from the 1975-79 period. Grant County's rates increased by 160.6% (6.6 to 17.2) and Owen County's by 94.6% (9.3 to 18.1). Thus, factors other than just the degree of urbanization or rurality are responsible for the high risk of an OOW birth in the Northern Kentucky Region.

The age group that contributes most to the excess risk in the Northern Kentucky Region is the 18-19 year-old group. The rate for the 13-14 year-old group is the same as the state average; 15-17 is moderately elevated; but the 18-19 group is much higher than the State average (30.0 per 1000 vs 20.7 per 1000). Such a situation is contrary to the statewide pattern for white 18-19 year-olds which shows a steady decrease in fertility rates for this age category (Table 1).

Table 3  
REGIONAL RISK INDICATORS (RRI) FOR NONWHITE TEENAGE  
OUT-OF-WEDLOCK (OOW) LIVE BIRTHS, ADJUSTED BY AGE.  
KENTUCKY, 1980-84

Region	Name	RRI	95% Confidence Limits	Rank	OOW Live Births	Rate <sup>†</sup> (1000)
6	Kentuckiana	1.21*	1.15-1.26	1	2,937	69.8
1	Purchase	1.11	0.98-1.25	2	293	63.0
2	Pennyrile	1.05	0.96-1.15	3	567	61.5
15B	Bluegrass - East	.96	0.89-1.04	4	843	58.5
7	Northern Kentucky	.88	0.73-1.06	5	120	49.8
4	Barren River	.81	0.72-0.94	6	311	51.2
3	Green River	.70	0.61-0.80	7	221	44.2
10	Fiveo	.70	0.41-1.21	7	14	40.9
14	Lake Cumberland	.70	0.55-0.91	7	62	40.7
15A	Bluegrass - West	.68	0.58-0.79	10	163	42.7
5	Lincoln Trail	.66	0.55-0.75	11	234	38.8
13	Cumberland Valley	.64	0.50-0.83	12	62	37.6
8	Buffalo Trace	.61	0.41-0.91	13	25	37.8
11	Big Sandy	.54	0.23-1.25	14	5	17.4
12	Kentucky River	.49	0.29-0.81	15	15	27.8
9	Gateway	.20	0.12-0.33	16	13	14.2
	TOTAL				5,883	59.2

\*Significantly high.

<sup>†</sup>Unadjusted rate per 1000 white females age 13-19.

Table 4  
WHITE TEENAGE AGE-ADJUSTED RATE RATIOS (RR) AND  
PERCENT CHANGE IN OUT-OF-WEDLOCK LIVE BIRTH RATES,  
FOR KENTUCKY REGIONS, 1975-79 AND 1980-84

Region	Name	RR	95% Confidence Limits	1975-79 Rate (R <sub>1</sub> ) <sup>†</sup>	1980-84 Rate (R <sub>2</sub> ) <sup>†</sup>	Percent Change R <sub>1</sub> TO R <sub>2</sub>
10	Fiveo	1.32*	1.15-1.52	8.5	11.1	+30.6
2	Pennyrile	1.28*	1.13-1.45	8.6	11.2	+30.2
7	Northern Kentucky	1.28*	1.19-1.37	13.2	17.0	+28.8
12	Kentucky River	1.28*	1.14-1.43	12.0	15.1	+25.8
13	Cumberland Valley	1.28*	1.17-1.40	12.2	15.5	+27.0
5	Lincoln Trail	1.27*	1.14-1.42	9.4	12.2	+29.8
6	Kentuckiana	1.23*	1.16-1.29	12.1	15.0	+24.0
4	Barren River	1.20*	1.07-1.36	7.6	9.2	+21.1
14	Lake Cumberland	1.19*	1.05-1.34	9.5	11.2	+17.9
15A	Bluegrass, West	1.19*	1.04-1.35	9.7	11.6	+19.6
8	Buffalo Trace	1.19	0.96-1.48	9.1	11.1	+22.0
3	Green River	1.18*	1.06-1.31	11.1	13.4	+20.7
9	Gateway	1.17	0.96-1.42	8.5	10.0	+17.6
1	Purchase	1.11	0.99-1.29	6.7	7.7	+14.9
11	Big Sandy	1.04	0.93-1.16	10.5	10.8	+2.9
15B	Bluegrass, East	1.00	0.93-1.08	10.9	11.1	+1.8
	KENTUCKY TOTAL	1.16*	1.13-1.19	10.9	12.8	+17.4

\*Significantly high.

<sup>†</sup>Unadjusted rate per 1000 white females age 13-19.



Table 5  
NONWHITE TEENAGE AGE-ADJUSTED RATE RATIOS (RR)  
AND PERCENT CHANGE IN OUT-OF-WEDLOCK LIVE BIRTHS,  
FOR KENTUCKY REGIONS, 1975-79 AND 1980-84

Region	Name	RR	95% Confidence Limits	1975-79 Rate(R <sub>1</sub> ) <sup>†</sup>	1980-84 Rate (R <sub>2</sub> ) <sup>†</sup>	Percent Change R <sub>1</sub> To R <sub>2</sub>
14	Lake Cumberland	1.13	0.79-1.63	36.1	40.7	+12.7
1	Purchase	1.10	0.93-1.30	57.0	63.0	+10.5
15A	Bluegrass - West	1.08	0.86-1.34	40.1	42.7	+6.5
4	Barren River	0.91	0.78-1.06	52.9	51.2	-3.2
6	Kentuckiana	0.89*	0.85-0.94	76.9	69.8	-12.2
12	Kentucky River	0.89	0.45-1.74	31.4	27.8	-11.5
2	Pennyriple	0.86*	0.77-0.96	68.0	61.5	-10.6
8	Buffalo Trace	0.86	0.51-1.47	41.8	37.8	-9.6
7	Northern Kentucky	0.77*	0.61-0.97	63.8	49.8	-21.9
5	Lincoln Trail	0.77*	0.66-0.91	50.2	38.8	-22.7
15B	Bluegrass - East	0.75*	0.69-0.82	73.3	58.5	-20.2
9	Gateway	0.72	0.35-1.46	22.5	14.2	-36.9
13	Cumberland Valley	0.70*	0.51-0.97	47.8	37.6	-21.3
3	Green River	0.65*	0.55-0.77	58.4	44.2	-32.1
10	Fivco	#	#	10.2	40.9	+301.0
11	Big Sandy	#	#	31.3	17.4	-44.4
	KENTUCKY TOTAL	0.86*	0.83-0.89	68.6	59.2	-13.7

#Insufficient observations.

\*Significantly low.

<sup>†</sup>Unadjusted rate per 1000 nonwhite females age 13-19.

In contrast, the only region with a significantly elevated RRI for nonwhite teenage OOW births is the Kentuckiana Region (RRI = 1.21). RRI's are slightly elevated for the Purchase (1.11) and Pennyriple (1.05) regions, but neither of these is statistically significant. Also important to note is that nonwhite rates for all regions, with the exception of Gateway, are higher than any of the regional rates for whites (Tables 2 and 3).

The major contributor to the high risk of nonwhite adolescent OOW births in the Kentuckiana Region is Jefferson County. This county had 2.885 of the 2.937 (98.2%) regional total and a very high rate of 71.7 per 1000 nonwhite teenagers. The other regional counties serve to slightly moderate Jefferson County's high rate, with Spencer and Trimble Counties having no adolescent OOW births during the five-year period. Jefferson County has a rate higher than the statewide rate for all three of the age categories, but is particularly high for 18-19 year-olds, 28.9% higher than the state rate (121.4 to 94.2). Jefferson County did experience a 9.9% decrease in the overall rate from the 1975-79 period, 78.8 to 71.7. This decrease was due largely to a 19.7% decrease in the 15-17 age group, which more than offset the slight increase in the 18-19 age group.

Tables 4 and 5 show the age-adjusted Rate Ratios (RR) used to evaluate regional trends in OOW birthrates for white and nonwhite teenagers. The RR are important because they identify those regions that during 1980-1984 experienced significantly higher OOW birthrates than would have been expected based on the 1975-1979 period. Since the RR are age adjusted they are minimally influenced by any changes that may have occurred in the regional teenage female population structure. For supplementary information, the unadjusted OOW birthrates for whites and nonwhites are also reported in Tables 4 and 5.

For white teenagers the statewide OOW birthrate was significantly higher (1.16) than would have been expected based on the rates from the 1975-79 period. Eleven of the 16 regions had significantly high RR; led by Fivco (1.32) and followed closely by Pennyriple (1.28), Northern Kentucky (1.28), Cumberland Valley (1.28) and Lincoln Trail (1.27). Of the remaining five regions with nonsignificant RR, three were considerably elevated: Buffalo Trace (1.19), Gateway (1.17), and Purchase (1.11). Only two regions were close to the expected rate in 1980-84: Big Sandy (1.04) and Bluegrass East (1.00), both having small increases in the unadjusted

rates of 2.9 and 1.8% respectively (Table 4). For all of Kentucky the number of OOW live births to white adolescents increased from 11,294 during the 1975-79 period to 13,222 during the 1980-84 period.

For nonwhites the situation is somewhat brighter. Of the 16 regions 12 had decreases in the adolescent OOW birthrate and the entire state averaged 13.7 percent less (68.6 to 59.2) between the two time periods (Table 5). The Rate Ratio for Kentucky was a statistically significant 0.86. Seven of the regions, including the heavily populated Kentuckiana and East Bluegrass Regions, had a RR significantly less than unity (Table 7). Only three regions, Lake Cumberland (1.13), Purchase (1.10), and West Bluegrass (1.08) had RR greater than unity and none was statistically significant. With these minor exceptions, the overall indication is that the OOW birthrate has been substantially reduced for Kentucky's nonwhite teenagers and the overall increase in this birthrate is almost entirely due to increases in OOW births among white teenagers.

### **Discussion**

An adolescent OOW birth is essentially the result of decisions that are consciously or unconsciously made at three separate points: to become sexually active, to use or not use contraceptives and to deliver rather than abort. The racial and regional variations that we have observed in Kentucky must be associated with variations in the decisions that teenagers make with respect to these three decision points. Strategies designed to redress these variations will need to be based on the factors that influence the three decisions points. For example, low socioeconomic status, low educational attainment and metropolitan residence are associated with increased adolescent sexual activity.<sup>2,15,16</sup> Among the influential social and psychological factors associated with increased sexual activity are lower grade point averages, lack of sex education and more traditional views of sex roles.<sup>15</sup>

The second decision point, to use or not use contraceptives, has been particularly associated with sex education. Zelnik and Kim report that sex education does not encourage sexual activity, but it may decrease the risk of pregnancy because the knowledge of contraceptives increases the likelihood of their use.<sup>17</sup> Also, young women who have knowledge of their siblings' or their parents' birth control experience, regardless of whether that experience was positive or negative, are more likely to use contraceptives effectively.<sup>18</sup> Knowledge of the correct use of contraceptives is important because 25%

of unintentionally pregnant adolescents report unsuccessful or inconsistent use.<sup>2</sup> Early contraceptive use alone could have a profound impact. One-half of all initial premarital adolescent pregnancies occur in the first six months of intercourse, with more than one-fifth occurring in the first month.<sup>2</sup>

A summary of factors influencing whether a pregnant teenager delivers or aborts, indicates that the likelihood of delivering is greater for older adolescents than for younger adolescents, for high school dropouts, for members of large families and one-parent households, and for those who have a sibling who was pregnant as a teen.<sup>19</sup> Teenagers who choose to deliver rather than abort also show poorer school performance, lower self-confidence, and more traditional views of sex roles and are more likely to have longer stable relationships with their boyfriend.<sup>20</sup>

We know of no current statewide data on sexual activity among Kentucky teenagers. Our data could indicate that the level of teenage sexual activity is not constant throughout the state, but varies widely from region to region. Of course, we have no way of knowing whether it is less sexual activity or an increased propensity to prevent or terminate pregnancy that is responsible for the regional variations in OOW live births. The variations are so substantial, however, that further research directed toward identifying the factors responsible is warranted, focusing on those regions that we have identified as having a significantly greater problem.

Another source of variation that cannot be ignored is the striking racial differences we noted in the substantially higher OOW rates for nonwhites than for whites (Tables 2 and 3). Only one region (Gateway) had a nonwhite rate lower than the highest regional rate for whites, while the state averages were 59.2 vs 12.8. This situation exists at the national level where a larger proportion of black adolescents are sexually active, and, among the sexually active, blacks are more likely to become pregnant.<sup>2</sup> However these differences are decreasing. The percentage of sexually active adolescent white women increased by 75% from 1971 to 1978, with a parallel increase among blacks of only 23%.<sup>3</sup> At the same time the percentage of sexually active whites who became pregnant increased by 36% while the black percentage remained essentially unchanged.<sup>3</sup> Kentucky mirrored the national situation in that between the five-year periods 1975-79 and 1980-84 all regional rates of white adolescent OOW live births increased, with a

state average of 17.4%, while rates for nonwhites decreased in 12 of the 16 regions, 13.7% statewide. Apparently, there is a strong trend for the rates among white and nonwhite adolescents to converge. At the moment, however, the rates for nonwhites remain substantially higher and call for special attention in devising strategies to reduce OOW parenthood in Kentucky. However, it should be remembered that in absolute numbers white OOW teenage births outnumbered nonwhite 13,222 to 5,883 for the five-year period 1980-84 (Tables 2 and 3).

Teenage OOW parenthood is increasingly common in Kentucky and poses many problems for both the individuals involved and the state as a whole. If the situation is to be improved within the current financial environment, difficult decisions about the allocation of resources will have to be made. We hope the data presented in this paper will provide a basis for making some of these difficult decisions.

**References** 1. Lou Harris & Associates Inc. November, 1985. This poll conducted for Planned Parenthood Federation of America Inc. found 84% of American adults regard teenage pregnancy as a serious national problem (N=1,253). 2. Allen Guttmacher Institute: *Teenage Pregnancy: The Problem That Hasn't Gone Away*. New York, Allen Guttmacher Institute, 1981 3. Zelnik M, Kanter JF: Sexual Activity, contraceptive use and pregnancy among metropolitan-area teenagers: 1971-1979. *Fam Plann Perspect* 1980;12:230-237 4. Kentucky State Center for Health Statistics: 1980 through 1984 *Annual Vital Statistics Reports*. Frankfort, KY 5. Hardy JB, Welcher DW, Stanley J, et al: Long-Range outcome of adolescent pregnancy. *Clin Obstet Gynecol* 1978;21:1215-1232 6. Field, B: A socio-economic analysis of out of wedlock births among teenagers. In *Teenage Parents and Their Offspring*, edited by K. Scott, T. Field, and E. Robertson. Grune and Stratton, New York, 1981, pp. 15-33 7. McCormack, MC: The contribution of low birth weight to infant mortality and childhood morbidity. *N Engl J Med* 1985;312:82-90 8. Institute of Medicine: *Preventing low birthweight*. Washington, DC, National Academy Press, 1985 9. Spurlock CW, Hinds MW, Skaggs JW, et al: A comparison of infant death rates among the poor and nonpoor in Kentucky, 1982-83. *Pediatrics* (in press) 10. Addiss SS: Setting goals and priorities: 1984 presidential address. *AJPH* 1985;75:1276-1280 11. Epicenter Software: *Epilog (Proc Risk)* — Version 2.4. Pasadena, CA., January, 1986 12. Rothman KJ and Boice JD: *Epidemiologic analysis with a programmable calculator*. Epidemiology Resources, Inc. Boston, 1982 13. Dryfoos, J: The epidemiology of adolescent pregnancy: incidence, outcomes, and interventions. In *Pregnancy in Adolescent: Needs, Problems, and Management*, edited by I Stuart and C. Wells. Van Nostrand Reinhold Company, New York, 1982, pp. 27-47 14. Centers for Disease Control: *Abortion surveillance—annual summary 1981*. Public Health Service, Atlanta, GA, November, 1985, p. 2 15. Udry J, Bouman K, and Maries N: Changes in premarital coital experiences of recent decade-of-birth cohorts of Urban American Women. *J Marriage Fam* 1975;37:783-787 16. Flick LH: Paths to adolescent parenthood: implications for prevention. *Pub Health Re* 1986;101:132-147 17. Zelnik M, and Kim Y: Sex ed-

ucation and its association with teenage sexual activity pregnancy and contraceptives use. *Fam Plan Perspect* 1977;9:55-71 18. Rogel M, and Zuellke M: Adolescent contraceptive behavior: influences and implication. In *Pregnancy in Adolescence: Needs, Problems and Management*, edited by I. Stuart and C. Wells. Van Nostrand Reinhold Company, New York, 1982, pp. 194-218 19. Eisen M: Factors discriminating pregnancy resolution decisions of unmarried adolescents. *Gen Psycho Monogr* 1983;108:69-95 20. Klerman L, Bracken M, Jekel J, et al: The delivery-abortion decision among adolescent. In *Pregnancy in Adolescence: Needs, Problems and Management*, edited by I. Stuart and C. Wells. Van Nostrand Reinhold Company, New York, 1982, pp. 219-235

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# Nerve Blocks Utilizing 0.5% Bupivacaine in the Treatment of Post-Herpetic Neuralgia

WILLIAM E. ACKERMAN, M.D.

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*Post-herpetic neuralgia can be a difficult syndrome to treat. A small percentage of patients may be resistant to most conservative therapy. Nerve blocks have been reported to be effective in patients with post-herpetic neuralgia of less than three months duration. However, using local anesthetics of higher concentrations than were previously reported, 11 patients with post-herpetic neuralgia greater than three months duration were treated and the results of a six month follow-up are encouraging.*

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**H**erpes zoster is an acute viral disease caused by the varicella zoster virus. Varicella and acute herpes zoster are two distinct diseases caused by this virus. During the primary infection, the varicella virus travels to a dorsal nerve root or to a cranial nerve ganglion and remains dormant until it is reactivated.<sup>1</sup> Because renewed immunity develops during viral reactivation, the virus is found in only a few nerves. Nerve involvement is usually unilateral. When the virus is reactivated, it travels along peripheral sensory nerves to produce symptoms of severe pain. Herpes zoster is a painful condition which usually subsides spontaneously. However, in some patients, this pain persists and intensifies causing a syndrome known as post-herpetic neuralgia.

The pain of herpes zoster may precede or occur along with development of a skin lesion. In most patients this pain is short lived and usually subsides within seven to 10 days. If post-herpetic neuralgia develops, a prolonged more painful course can be anticipated. The pain of post-herpetic neuralgia, which is often associated with hyperesthesia, can be painful enough to provoke suicide in some patients.<sup>2</sup>

Patients with Hodgkin's disease are at the greatest risk for developing herpes zoster.<sup>3</sup> Other risk factors

include: carcinoma, chemotherapy, trauma, radiation therapy, corticosteroid therapy and increasing age.<sup>4</sup> Approximately 10% of patients under age 60 develop post-herpetic neuralgia while 50% of patients greater than 60 years of age develop this syndrome.<sup>5</sup> In a 15 year Mayo Clinic study, 45% of patients with post-herpetic neuralgia had pain which lasted less than eight weeks, while 22% had pain which lasted longer than one year.<sup>6</sup>

The pathogenesis of post-herpetic neuralgia is unknown. Post herpetic neuralgia is either a continuation of or a sequel to herpes zoster occurring during periods of decreased cell immunity. The latter explanation is generally accepted because most patients have no recent history of exposure to the virus.<sup>7</sup>

Post-herpetic neuralgia presents a difficult management problem for physicians. Specific remedies are unavailable and symptomatic ones often exhibit only a modest degree of success. Referral to pain clinics for nerve blocks, TENS units, biofeedback and psychological consultations have not demonstrated a consistent high rate of success. None of the reported treatments of post-herpetic neuralgia has a consistent high rate of success. Rhizotomies, antidepressants, psychotropic and anticonvulsant drugs have had only modest success in alleviating post-herpetic neuralgia pain. Most physicians initiate treatment with non-steroidal anti-inflammatory drugs and progress to tricyclic antidepressants or antiepileptics such as phenytoin and carbamazepine. Nerve blocks administered early in the development of herpes zoster have been reported to eliminate the pain of herpes zoster and have been shown to prevent the development of post-herpetic neuralgia.<sup>8</sup> Nerve blocks have also been reported to be effective in the treatment of the pain of post-herpetic neuralgia of less than three months duration.<sup>9</sup> Eleven patients were treated on an out-patient basis with a relatively high degree of success.

TABLE 1

Patient	Duration Of Pain	Pain Distribution	Number of Injections And Type	Pain Level Scale	
				Pre-Block	6 Months Later
1 64 M	3 yrs.T	4,5,6 R side of face	3-intercostal	4	1
2 32 F	9 yrs.and neck		2-stellate	4-5	0
3 60 F	1-5 yrs.T	3,4,5	3-intercostal	3	2
4 61 M	2 yrs.T	10-12	2-epidural	4	0
5 72 M	3-5 yrs.T	4,5,6	2-intercostal	4	0
6 63 M	5 mos.T	10-12	2-epidural	4	1
7 71 F	2 yrs.T	6,7,8 Anterior L	3-intercostal	4	3
8 46 M	1 yr.upper chest		2-stellate	(pain severe on occasion) 5 (require codeine) 4	
9 65 F	2 yrs.T	4,5,6	2-intercostal	4-5	0
10 59 M	1-5 yrs.Lower abdomen		2-lumbar epidural	4-5	0
**	Anterior Chest				
11 69 M	13 mos.and axilla		3-stellate	4	1

**Pain Level Scale**  
0 = No Pain 1 = Pain Barely Noticeable 2 = Pain Noticeable; No Analgesics Required 3 = Pain Noticeable; Requires Mild Analgesic 4 = More Severe Pain; Requires Strong Analgesic 5 = Maximum Pain; Narcotic Required

**Table 1**  
Results of nerve blocks using 0.5% bupivacaine in post-herpetic neuralgia of greater than three months duration.  
\* Patient had overdose on narcotics on two occasions, requiring hospitalization.  
\*\*Anterior chest pain relieved with one stellate ganglion block. Two subsequent stellate ganglion blocks necessary to decrease axillary pain.

## Clinical Materials and Methods

Eleven patients who had chronic post-herpetic neuralgia were referred for pain clinic evaluation for a potential nerve block. One patient had pain for five months. Each of the other 10 patients had pain longer than 12 months. Two patients were under 59 years of age. Each patient was asked to evaluate the severity of the pre-block pain, immediate post-block pain, and six months post-block pain, using a scale of 0-5. The scale used was as follows: 0 = no pain; 1 = pain barely noticeable; 2 = pain that is noticeable, but requires no analgesics; 3 = pain that is noticeable and requires a mild analgesic such as acetaminophen; 4 = pain that is more severe and requires a more potent analgesic, such as codeine, for relief; 5 = the maximum pain received, requiring the use of a potent narcotic for relief. Each patient was examined and given the appropriate nerve block, using 0.5% bupivacaine. The nerve blocks performed were either an epidural, intercostal or a stellate ganglion block. All of the patients had failed to receive adequate pain relief from more conservative therapies consisting of either analgesics, transcutaneous nerve stimulation, antidepressant or anticonvulsant drugs. In this patient population if, after 24 hours, the pain relief was no less than a subjective response of 2, a repeat block was performed. The nerve

blocks were repeated on alternate days until the patients had no pain. Each intercostal nerve block was done with 3 ml of 0.5% bupivacaine. The epidural blocks were done with 6-10 ml of 0.5% bupivacaine, depending upon the patient's height. The stellate ganglion blocks were performed with 10 ml of 0.5% bupivacaine.

## Results

All of the patients reported immediate post-block pain after a series of blocks were performed. Five patients (45%) reported complete relief within six month follow-up. Three other patients (27%) reported pain that was barely noticeable on occasion, but did not require any analgesics. After six months the one patient, whose pain returned requiring codeine relief, had been on narcotics prior to initiation of the nerve blocks. The results of this study are listed in Table 1.

## Discussion

Herpes zoster is a painful condition which usually subsides spontaneously. However, in some patients this condition develops into post-herpetic neuralgia. The etiology of post-herpetic neuralgia is unknown. It is known, however, that there is an increase in the proportion of small unmyelinated nociceptive c fibers to other fibers in the affected nerve roots of post-herpetic neuralgia patients.<sup>10</sup>



C fibers are small with reference to other fibers, have a slow conduction velocity and transmit dull pain. These fibers are surrounded by a sheath of single Schwann cells called a Remak bundle. Remak bundles act as a barrier to local anesthetics. Heavner and DeJong have demonstrated that it takes three times the concentration of local anesthetic to block c fibers as opposed to larger myelinated nerve fibers in isolated rabbit cervical nerve trunks.<sup>11</sup> The concentration of bupivacaine used in previous reported articles was 0-25%.<sup>8,9</sup> The clinical data reported in this paper demonstrate that nerve blocks implementing higher concentrations of local anesthetics than were previously reported may be of significant benefit in helping to alleviate the pain of post-herpetic neuralgia of long duration.

Although this series is small, the results are encouraging and indicate that neural blockade utilizing 0.5% bupivacaine is of benefit in treating the pain of post-herpetic neuralgia that is intractable to conventional medical therapy. It is felt that these results can provide direction for further investigation.

**References** 1. Miller LH, Brunnel PA: Zoster. Reactivation or activation of latent virus? *Am J Med* 49:480-483, 1970. 2. Stein JM, Warfield CA: Herpes Zoster and Postherpetic Neuralgia. *Hospital Practice* 9:96a-96o, 1982. 3. Sokal JE, Firat O: Varicella-zoster infections in Hodgkin's disease. *Am J Med* 39:452-463, 1965. 4. Mazur MH, Dolin R: Herpes zoster at the NJH: a 20-year experience. *Am J Med* 65:738-744, 1978. 5. DeMoragas JH, Kierland RR: The outcome of patients with herpes zoster. *Arch Dermatol* 75:193-196, 1957. 6. Raggozzino NW, Melton IJ, Kurland LT, et al: Population-based study of herpes zoster and its sequelae. *Medicine* 61:310-316, 1982. 7. Revler JB, Chang MK: Herpes Zoster: Epidemiology, clinical features and Management. *South Med J* 77:1149-1156, 1984. 8. Colding A: The effect of regional sympathetic block in the treatment of herpes zoster: A survey of 300 cases. *Acta Anaesth Scand* 13:133-140, 1969. 9. Perkins HM, Hanlon PR: Epidural injection of local anesthetic and steroids for relief of pain secondary to Herpes Zoster. *Arch Surg* 113:253-254, 1978. 10. Lourie H, King RB: Sensory and neurohistological correlates of cutaneous Hyperpathia. *Arch Neurol* 313-320, 1966. 11. Heavner JE, DeJong RH: Lidocaine blocking concentrations for "B" and "C" nerve fibers. *Anesthesiology* 40:228-233, 1974.

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# Management of Diabetes Mellitus in Pregnancy

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**P**regnancies associated with insulin dependent diabetes mellitus have been associated with a perinatal mortality five to 10 times that of the non-diabetic obstetrical population.<sup>1</sup> Perinatal deaths due to prematurity, trauma, maternal acidosis and malformations account for this perinatal wastage.<sup>2</sup> In the last 10 years considerable success has been achieved in decreasing perinatal morbidity and mortality. This has been done by careful control of maternal diabetes, a liberal policy of cesarean birth to eliminate traumatic labor and delivery and preterm delivery to reduce fetal deaths.<sup>3-6</sup>

It is the purpose of this paper to delineate the management of the insulin dependent diabetic woman during pregnancy and to give the statistics and results of the first year following institution of a program supported by a grant from the Kentucky Affiliate of the American Diabetes Association. During the period of time January 1, 1985 to March 1986, 33 insulin dependent diabetics were cared for under this program. There was one pregnancy loss at nine weeks gestation and one at 14 weeks gestation. There were no other pregnancy losses.

## Material and Methods

During the period of time January 1, 1985 to March 1986, 33 patients were given care. Table 1 gives the classification according to the White System and shows the one spontaneous abortion and mid-trimester loss at 14 weeks gestation. No immediate cause for these two pregnancy losses could be ascertained. Table 2 gives the method of delivery for the 31 patients. A high cesarean birth rate of approximately 48% is noted. Neonatal outcome is depicted in Table 3. The one anomaly was hypospadias in the child of a Class R diabetic. The morbidity in the newborn nursery consisted of hypoglycemia, hyperbilirubinemia and respiratory distress amenable to proper neonatal intensive care. The antepartum surveillance and the number of tests is given in Tables 4 and 5. The high incidence of hypertensive disease complicating diabetes is given in Table 6.

## Method of Management

On the initial visit, the insulin dependent woman is evaluated by a physician, nurse and by the Diabetes Nurse Educator.

Maintenance of a mean blood glucose of 105-110 mg. % required split dosage administration two to four times a day of long acting and regular insulin. In the majority of patients, Humulin® insulin was used.

Most patients were controlled well with NPH and regular insulin in the morning and NPH and regular insulin in the late afternoon. Others required the above morning regimen and regular insulin before the evening meal and long acting insulin about 10:00 p.m. along with an evening snack.

Those diabetics who first required insulin during pregnancy were begun on Humulin® to decrease the potential risk of antibody formation, allergic reactions and possible insulin resistance.

If not already being done, home blood glucose monitoring is begun on a four times per day schedule (fasting and two hour postprandial). The blood glucose monitors are provided through a grant by the Kentucky Affiliate of the American Diabetes Association.

Patients are asked to record their diet and blood glucose levels in a log which is brought to their clinic visits. These are evaluated and appropriate changes in insulin and diet are made. Between visits, abnormal blood glucose levels are reported by phone to the Diabetes Nurse Educator and/or physician.

Dietary guidelines include a high fiber diet, 55% complex carbohydrates, low fat and no concentrated sweets. Optimum caloric intake is determined by multiplying ideal body weight in kilograms by 30 K/cal. Dietary consultation is carried out as needed.

Ultrasound evaluation is done in the first trimester for fetal age. If indicated, genetic amniocentesis is done between the 15-16 week for chromosome analysis and alpha-fetoprotein levels obtained for neural tube defects. A maternal serum alpha-fetoprotein at 15-17 weeks screening test has been performed on all insulin dependent diabetics since January 1986. The ultrasound

**TABLE I**  
Perinatal Mortality  
Classes B to R  
1985–86

No.	Classes			
	B	C	D	R
No.	20	7	4	2
AB-Spont.	1	0	0	0
Mid. Tri. Loss	1	0	0	0
No perinatal deaths				

**TABLE II**  
Labor and Delivery  
Classes

No.	Classes			
	B	C	D	R
No.	18	7	4	2
Labor				
Spont.	3	1	0	1
Ind.	6	3	2	1
C.S.				
Primary	8	3	0	0
Repeat	3	0	2	0

**TABLE III**  
Neonatal Outcome  
Classes

No.	Classes			
	B	C	D	R
No.	18	7	4	2
Gestational				
Age	33–41	37–40	36–41	37
Birth Weight	1985– 4310	1220– 4640	3544– 3650	2800– 4250
Morbidity	2	2	2	0*
Anomalies	0	0	0	1**
Respiratory				
Distress	2	0	0	0

\*Hypoglycemia, hyperbilirubinemia

\*\*hypospadias

examination is repeated at 22–25 weeks gestation for biparietal diameter measurements and a fetal anomaly screen done.

Fetal testing include non-stress test (NST) and contraction stress test (CST) (via nipple stimulation) beginning at 32 weeks and repeated at least weekly until delivery. An amniocentesis is done at 36–38 weeks for an amniotic fluid lecithin/sphingomyelin ratio (L/S) and the presence of the acidic phospholipid phosphatidylglycerol (PG).

If the L/S ratio is 3:1 or greater and PG present, delivery is carried out by induction of labor. If an 8–12 hour induction is not successful, cesarean birth is done. If there is evidence of fetal distress prior to fetal maturity, delivery is performed.

**TABLE IV**

Antepartum Surveillance  
Classes

No.	Classes			
	B	C	D	R
No.	18	7	4	2
U/S	18	7	4	2
NST	15	7	4	2
CST	16	6	4	2

**TABLE V**

Antepartum Surveillance  
Classes

No.	Classes			
	B	C	D	R
No.	18	7	4	2
Late Decels in Labor	4	0	0	0
Abn. NST-CST	4	1	2	0

**TABLE VI**

Hypertension  
Classes

No.	Classes			
	B	C	D	R
No.	3	0	0	0
Preeclampsia	7	1	0	0
Chronic	2	1	0	0
Both	1	1	0	0

Laboratory work includes complete blood count, VDRL, blood type and antibody screen, urinalysis and rubella titre. A glycohemoglobin is followed every three months during the pregnancy. Electrocardiographic study and a 24-hour urine collection for creatinine clearance and protein excretion are done when indicated. Ophthalmology consultations are requested and patients are encouraged to attend childbirth classes.

## Discussion

It is now well established that the woman with diabetes will often have a successful pregnancy provided her care is directed by an experienced team. Each member of the team, obstetrician, nurse, pediatrician and dietitian, must pay careful attention to all details. It was established over 15 years ago that normal glycemia must be obtained and is paramount for a successful outcome.<sup>7</sup> Several large medical centers throughout Europe and the United States have demonstrated that normal glycemia coupled with new techniques for antepartum fetal assessment has yielded a perinatal mortality of less than 4%.<sup>1–6</sup> The day will come when the only perinatal losses are those with congenital anomalies incompatible with life. Even congenital anomalies have been shown to be related to the

degree of control of the maternal blood sugar at the time of conception.<sup>8,9</sup>

Therefore, the important goals for the treatment team are control of maternal blood sugar, elimination of complications due to trauma, prevention of prematurity, detection of intrauterine fetal distress and proper newborn care.

The data in this paper again emphasizes that the team approach including frequent visits with constant surveillance by an experienced team, including telephone contact, yields optimum results. The woman with diabetes should be seen frequently and a liberal approach taken to hospitalization when optimum control cannot be maintained on outpatient basis. Therapy depends upon dietary supervision and proper insulin dosage. Oral hypoglycemics should not be used in the pregnant woman for these drugs can be teratogenic and can produce profound neonatal hypoglycemia.<sup>1,2</sup>

Frequent clinic visits with individual control of the blood sugar will prevent maternal acidosis. Infections, particularly pyelonephritis, must be prevented or properly treated. Hypertension must be treated by bedrest or hospital admission to reduce the frequency of the significant complication of preeclampsia.

Previously, much of the perinatal mortality was associated with intrauterine fetal deaths or iatrogenic prematurity. We now have the ability to determine fetal maturity, both by ultrasound examination and the L/S ratio. An L/S ratio of three with 4% PG is a desirable goal prior to termination of pregnancy. Our low incidence of respiratory distress, two cases, attests to the judicious use of fetal maturity studies.

This plan of management has significantly reduced our perinatal mortality — two pregnancies prior to a stage of viability. Deaths due to iatrogenic prematurity and trauma have been eliminated. It is to be emphasized that the above regimen, ie, a team approach, will produce optimum results.

### Summary

This paper delineates the modern management of the insulin dependent woman during pregnancy. Optimal results are obtained when maternal plasma glucose levels are maintained at fasting levels of 90 mg/dl and postprandial levels of 120 mg/dl. Frequent visits and fetal well being studies are essential during the pregnancy. This paper gives the results of 33 patients cared for during 1985–1986. There was one pregnancy loss at nine weeks and one at 14 weeks gestation. Thirty-one mothers had healthy infants.

**References** 1. Gabbe SG, Mestman JH, Freeman RK, et al, Management and outcome of diabetes mellitus, Classes B-R, *Am J Obstet Gynecol* 129:723–730, 1977. 2. Gabbe, SG, Management of diabetes mellitus in pregnancy, *Am J Obstet Gynecol* 153:824–828, 1985. 3. Cohen AW, Gabbe SG, Intrapartum management of the diabetic patient, *Clin Perinatol* 8:165–170, 1981. 4. Golde SM, Montoro M, Good-Anderson B et al, The role of nonstress tests, fetal biophysical profile, and contraction stress tests in the outpatient management of insulin-requiring diabetic pregnancies, *Am J Obstet Gynecol* 148:269–275, 1985. 5. Varner MW, Efficacy of home glucose monitoring in diabetic pregnancy, *Am J Med* 75:592–596, 1983. 6. Hollingsworth, DR, Pregnancy diabetes and birth, A management guide, Williams and Wilkins, Baltimore/London, 1984. 7. Karlsson, K Kjellmer, The outcome of diabetic pregnancies in relation to the mother's blood sugar level, *Am J Obstet Gynecol* 112:213–220, 1972. 8. Miller E, Hare JW, Cloherty, PJ, et al, Elevated maternal hemoglobin A<sub>1c</sub> in early pregnancy and major congenital anomalies in infants of diabetic mothers, *NEJM* 304:1331–1334, 1981. 9. Fuhrmann K, Reiher H, Semmler K, et al, Prevention of congenital malformations in infants of insulin-dependent diabetic mothers, *Diabetes Care*, 6:219–222, 1983.

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# Drug Selection After Overdose Recovery: Carbamazepine or Lithium

RAYMOND PARY, M.D., STEVEN LIPPMANN, M.D.  
DANIELLE M. TURNS, M.D. and CARMELITA R. TOBIAS, M.D.

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*This paper highlights clinical problems associated with a recent recovery from an overdose. Two case reports are cited and treatment strategies discussed. People who have taken a drug overdose may have a pattern of persistent impulsivity and impairment in judgement. Lithium and carbamazepine are medicines commonly employed for mood stabilization in patients with bipolar disorder, and each drug has its unique advantages. In patients recently recovering from an overdose, carbamazepine may offer greater safety compared to lithium. This is especially true when the affectively disordered person manifests impaired judgement. Carbamazepine offers a wider therapeutic index than lithium. The lowest known adult lethal overdose quantity for carbamazepine is over 60 grams, or approximately 300 tablets. Lethality from a lithium overdose has been reported from ingestion of 12 grams, or approximately 40 tablets. Support from a family member agreeing to keep and distribute medication offers additional safety. Consideration of current suicide risk, past response to medicines, past family response to medication, and associated medical conditions are necessary before prescribing for the patient with a recent overdose.*

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Physicians are often faced with a difficult clinical decision following the recovery of their patients from an overdose. Both the efficacy and lethality of a medication must be considered before prescribing for individuals who were recently suicidal. This is especially true in patients with impaired judgement and impulsive behavior. Two vignettes are presented which highlight this problem.

January 1987

## Case Report One

A 27-year-old white, separated, male was hospitalized after ingesting 24 carbamazepine tablets (200 mg) with alcohol in a suicide attempt. On arrival he was alert, oriented and responsive. The physical examination was normal. Laboratory studies were unremarkable except for a carbamazepine level of 17.8 ug/ml (therapeutic range: 8 to 12 ug/ml).

The mental status examination revealed delusions of influence. Impaired judgement was present, based upon the current overdose, multiple past suicide attempts, inability to function in employment, frequent alcohol intoxication, and inconsistency in taking prescribed drugs in follow-up. The past history included 15 psychiatric hospitalizations over the past decade for bipolar illness. Episodes of hyperactivity, insomnia, and grandiosity alternated with periods of depression.

Treatment started with close observation, monitoring vital signs and repetition of carbamazepine levels (less than 0.5 ug/ml on day 11). During the first hospital week chlorpromazine (800 mg/day) and lithium (1200 mg/day) were prescribed with good response. The patient was discharged to follow-up without evidence of psychosis or suicidal intent.

## Case Report Two

A 33-year-old single, white, male was hospitalized following a carbamazepine overdose. On admission the physical examination was normal and the carbamazepine level was 24 ug/ml. Mental status examination revealed agitation, disorientation to time, pressured speech, and loose associations. During the interview the patient mumbled to himself; therefore, hallucinations were inferred. The patient claimed that a friend wanted him dead and that he took the overdose only to sleep rather than to end his life. Routine laboratory studies were unremarkable, but left ventricular hypertrophy was documented on the electrocardiogram.

Evidence for poor judgement included inability to handle his daily affairs and a recent past lithium overdose just prior to this hospitalization. The patient had made other suicide attempts and was impulsive. Extensive treatment for bipolar disorder over a 10-year period included neuroleptics and in recent years, lithium.

The choice between lithium or carbamazepine was discussed as maintenance options. The patient had overdosed on both drugs allegedly without suicidal intent, in order to induce sleep. Both overdoses occurred within the past month. Carbamazepine 200 mg, tid, was selected due to its relative safety in an overdose-prone person.

### Discussion

In the first case, chlorpromazine was the agent of choice because of its efficacy against psychotic agitation. The patient reported that chlorpromazine alleviated his sense of restlessness to a much greater degree than other neuroleptics. The next decision was whether to prescribe carbamazepine or lithium for maintenance treatment. The patient stated that lithium was more effective in controlling his mood swings; however, a major risk in using lithium is the low margin of safety of this drug in overdoses. The dangers of lithium toxicity are established in medical literature.<sup>1,2,3</sup> In spite of the patient's poor judgement the psychiatrist, together with this patient, chose to accept the risk of a more dangerous lithium overdose because of a history of a better response to that drug. In the second case, carbamazepine was chosen over lithium because of its greater safety. This patient had previously been delirious from a lithium overdose, necessitating treatment in the intensive care unit.

There have been several controlled, double blind studies in patients with bipolar or schizoaffective disorders which report the usefulness of carbamazepine in decreasing manic or depressive symptoms.<sup>4,5,6</sup> The precise mechanism of action for carbamazepine is not known but it may be related to inhibition of kindling phenomenon in the temporal lobe and limbic system.<sup>7</sup> Kindling refers to repeated electrical stimulation, culminating in either seizures or psychopathology. Biochemical effects of carbamazepine also include the blockage of norepinephrine re-uptake and release, a decrease in gamma-aminobutyric acid turnover and decreased accumulation of cyclic adenosine monophosphate.<sup>8</sup>

There are several contrasting effects between lithium and carbamazepine. Carbamazepine decreases thyroid

hormones without substantial increase in thyroid stimulating hormone (TSH).<sup>9</sup> Lithium also decreases thyroid hormones, but with a significant increase in TSH. Carbamazepine has an agonist effect on vasopressin activity, while lithium has the opposite effect.<sup>9</sup> Carbamazepine has been used to treat diabetes insipidus while lithium is associated with the etiology of nephrogenic diabetes insipidus.<sup>9</sup> In contrast to the leukocytosis induced by lithium, many patients on carbamazepine develop a leukopenia. The reduction in white blood cell count is not dose related and is rarely clinically significant. Carbamazepine should be discontinued if the total white blood cell count falls below 3000/mm<sup>3</sup> or if the neutrophil count declines to 1500/mm<sup>3</sup>.<sup>10</sup>

Adverse neurological effects of carbamazepine include transient diplopia, drowsiness, blurred vision, and disturbance of coordination.<sup>11</sup> A pruritic rash occurs in 8% of cases.<sup>12</sup> Agranulocytosis and aplastic anemia are recorded in one in 20,000–50,000 patients.<sup>9</sup> Gastrointestinal side effects develop in 15% of patients and are most frequently nausea, vomiting, and diarrhea.<sup>13</sup> Rare complications include granulomatous hepatitis,<sup>14</sup> heart block,<sup>15</sup> and water intoxication.<sup>16</sup>

One advantage of carbamazepine not often emphasized, is the wider safety margin between the therapeutic and the toxic dose of carbamazepine compared to lithium.<sup>11</sup> The acute oral LD<sub>50</sub>\* of lithium carbonate in rats is approximately 710 mg/kg,<sup>17</sup> while that of carbamazepine is between 3850 and 4025 mg/kg.<sup>18</sup> The lowest known adult lethal quantity for a carbamazepine overdose is over 60 gms,<sup>19</sup> a wide safety margin, indeed. By contrast, fatal lithium overdoses are reported after ingestion of approximately 12 gms.<sup>20</sup> This contrast is graphically illustrated by the number of pills necessary for a dangerous overdose, *ie* lethality is approached with lithium with only 40 of 300 mg tablets or even less in the 450 mg version, while carbamazepine would require 300 of the standard 200 mg tablets to reach a similar degree of dangerousness. On this basis, the impulsive patient might be considered a good candidate for carbamazepine. Other favorable prospects for carbamazepine include the lithium refractory case and the rapid cycling bipolar subject.<sup>21</sup> While there

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*\*LD<sub>50</sub> is a term which refers to the median lethal dose or the lethal dose of a compound for 50% of a test group of experimental animals of the same species.*



## OVERDOSE RECOVERY—Pary et al

have been many deaths from lithium overdoses, fatalities from overdoses of carbamazepine are rare.

In prescribing for the recently suicidal person, certain precautions must always be considered. The patient should be carefully evaluated for current suicide risk and whether continued hospitalization is needed. Assuming that the assessment reveals no current suicidal intentions, the next decision facing the doctor involves the choice of medication. Past drug response is generally one of the best predictors to future response. The same applies to efficacy of a specific medicine within their blood relatives. If the previous response to two medications has been approximately equal, the drug with the widest margin of safety between the therapeutic and toxic dose should be prescribed. Because patients with suicide attempts frequently have impaired judgement, it is preferable to engage the support of a family member for medication monitoring. A conjoint interview with the patient and family provides a convenient setting for an agreement on the distribution of medicines. There is added safety to an arrangement whereby a family member agrees to keep and distribute medication. The patient's consent is crucial and necessary for such a plan to work on a long term basis.

Other medical conditions also should be taken into consideration for selection of medication. For example, a seizure patient with a cyclical mood disturbance may find carbamazepine, with its anticonvulsant action, an excellent psychopharmaceutical treatment as opposed to lithium, which can lower the seizure threshold. Lithium, however, may be preferred over carbamazepine in a person with a bone marrow disease.

In conclusion, the patient with an affective disorder, impaired judgement, and a recent overdose offers a difficult challenge to the practicing physician. Assessment of current suicide risk, previous response to medication, potential help from family members, and associated medical problems are necessary for proper treatment. Carbamazepine offers a greater margin of safety compared to lithium for the overdose-prone bipolar patient.

### Editor's Note

While these drugs may be useful in treatment of the disorder, potential for toxicity necessitates close monitoring by a physician.

**References** 1. Amdisen A, Gottfries L, Jacobsson L, Winblad B: Grave lithium intoxication with fatal outcome. *Acta Psychiatrica Scand* 255:25–33, 1974. 2. Peiffer J: Clinical and neuropathological aspects of long-term damage to the central nervous system after lithium medication. *Arch Psychiatr Nervenkr* 231:41–60, 1981. 3. Shou M: Long lasting neurological sequelae after lithium intoxication. *Acta Psychiatr Scand* 70:594–602, 1984. 4. Ballenger JC, Post RM: Therapeutic effects of carbamazepine in affective illness: a preliminary report. *Commun Psychopharmacol* 2:159–175, 1978. 5. Ballenger JC, Post RM: Carbamazepine in manic depressive illness: a new treatment. *Am J Psychiatry* 137:782–790, 1980. 6. Okuma T, Inanaga K, Otsuki S et al: Comparison of the antimanic efficacy of carbamazepine and chlorpromazine: a double-blind controlled study. *Psychopharmacology* 66:211–217, 1979. 7. Post RM, Uhde TW, Putnam, FW: Kindling and carbamazepine in affective illness. *J Nerv Ment Dis* 170:717–731, 1982. 8. Post RM, Ballenger, JC, Uhde, TW et al: Efficacy of carbamazepine in manic-depressive illness: implications for underlying mechanisms. In: Post RM, Ballenger JC eds. *Neurobiology of Mood Disorders*. Baltimore: Williams & Wilkins: 777–817, 1984. 9. Post RM, Uhde TW: Carbamazepine in bipolar illness. *Psychopharmacology Bulletin* 21:10–17, 1985. 10. Joffe RT, Post RM, Roy-Byne PP, Uhde TW: Hematological effects of carbamazepine in patients with affective illness. *Am J Psychiatry* 142:1196–1199, 1985. 11. Okuma T: Therapeutic and prophylactic effects of carbamazepine in bipolar disorders. *Psychiatric Clin North Am* 6:157–174, 1983. 12. Roberts DL, Marks R: Skin reactions to carbamazepine. *Arch Dermatology* 117:273–275, 1981. 13. Suria A, Killiam ER: Antiepileptic drugs: mechanism of action. *Adv Neurol* 563–75, 1980. 14. Levy M, Goodman MW, Bruce J: Granulomatous hepatitis secondary to carbamazepine. *Ann Intern Med* 95:64–65, 1981. 15. Ladefoged SD, Mogelvang JC: Total atrioventricular block and syncope complicating carbamazepine therapy. *Acta Med Scand* 212:185–186, 1982. 16. Perucca E, Garrat A, Hebdige S et al: Water intoxication in epileptic patients receiving carbamazepine. *J Neurol Neurosurg Psychiatry* 41:713–718, 1978. 17. Gosselin RE, Smith RP, Hodge HC, Braddock, JE: Lithium in *Clinical Toxicology of Commercial Products*. Baltimore/London, Williams & Wilkins, 1984. 18. Geigy Pharmaceuticals: Tegretol in *The Physician's Desk Reference*. Edited by Huff BB, Knipping WJ, Harley Y, Edytheperniti F, Sasoon LL, New Jersey, Medical Economics Inc., 1986. 19. Carbamazepine in "Drug Facts and Comparisons" Edited by Boyd JR et al. Philadelphia/Toronto: J.B. Lippincott: 1098, 1985. 20. Green ST, Dunn FG: Severe leucopenia in fatal Lithium poisoning. *Br Med J* 290:517, 1985. 21. Post RM, Berrettini W, Uhde, TW, Kellner C: Selective response to the anticonvulsant carbamazepine in manic-depressive illness: A case study. *J Clin Psychopharmacol* 4:178–185, 1984.

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Quietly the news starts to filter through the international sieve. Names lost in the shadows of other events begin to emerge and those of us who forgot are awakened by our ignorance. Whether it be an official world war, a revolution, a religious convulsion, a totalitarian struggle, the acts of the play are similar and the scenes all too familiar. Perhaps most poignant are the tales of torture, which are told by those who bore it and those who were witnesses. Lines become indistinct between compelling people to give information and personal injury in its own right.

Methods for these actions are developed over periods of time. Our government works on psychological and physical means to secure information, hoping to keep that delicate humane adjective in focus. Other lands find that moral obligation less restraining and feel more comfortable on the dark side.

Our medical profession places the highest value on life and dignity. Years of toil with books and patients grow an undeniable pledge to protect and preserve life. Yet the forces of evil are there. Some come in the form

of mandatory conscription and consequent enlistment in the service of the malefactors. Other forces are those of political zeal and dedication, to the point of xenophobia. Blinded, such doctors rationalize their cooperation with excuses based on expediency. Unfortunately there are the immoral ones, those whose socio- or psychopathic ethos permits them license to act without consideration of righteousness.

Ultimately judgment is exercised, or at least we hope it will be, and the outlaws are removed. Yet each episode—Mengele, the Khmer regime, Khomeini zealots—employ physicians to enact their plans. People lose faith that what should ideally be a noble profession is capable of heinous acts, that behind a facade of white robe and scopes may lie a dangerous animal.

Tested we will be with the pressures of the times in the future. To embrace the precepts of our profession, to hold them dear and immutable, will be our charge.

**Stephen Z. Smith, M.D.**

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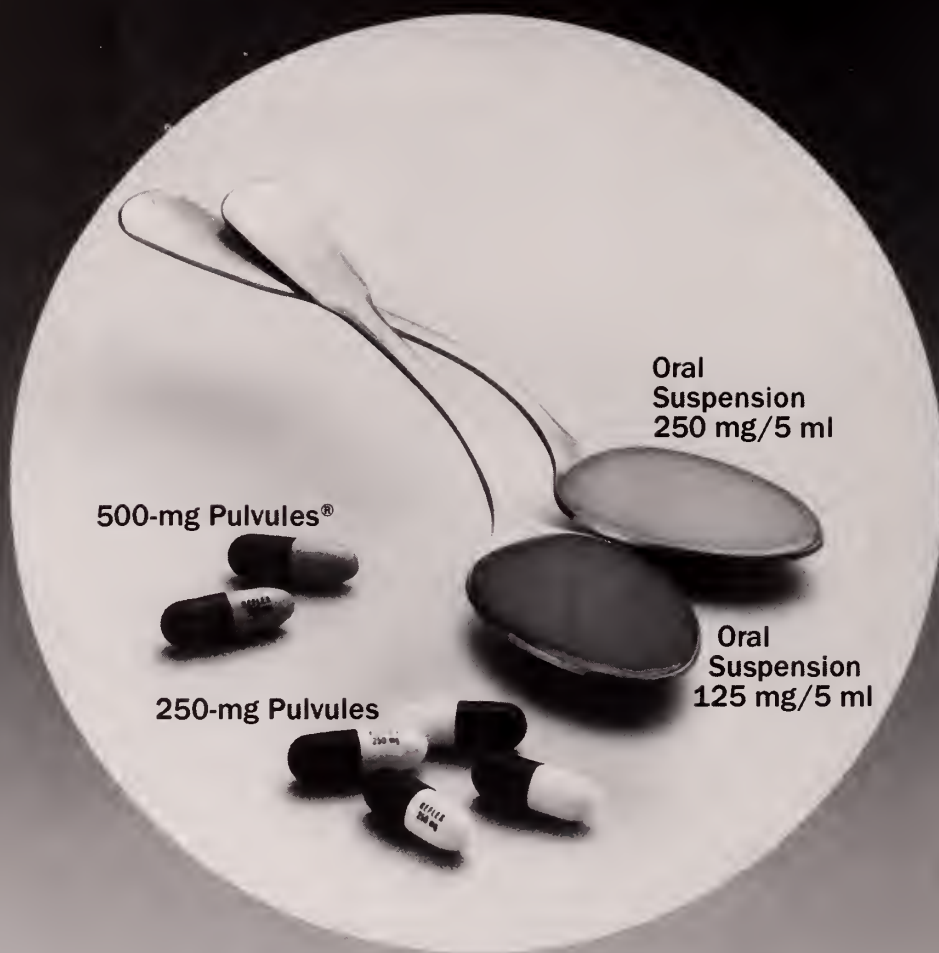


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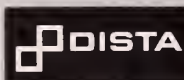
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# Sarcomas of the Retroperitoneum

BRIAN G. HARBRECHT, M.D., JOHN R. GOSCHE, M.D. and GERALD M. LARSON, M.D.

Overall malignant tumors in the retroperitoneum are four times more frequent than benign tumors.<sup>1</sup> The most common retroperitoneal tumor is the lymphoma, which accounts for one-third of these cases. Sarcomas and their various subtypes are the next most frequent tumors. Soft-tissue sarcomas are uncommon and represent approximately 1% of all malignant tumors.<sup>2</sup> They are thought to arise from a primitive multipotential mesenchymal stem cell. There are over 20 types of these tumors and they may occur in any body site. The retroperitoneum is the second most common body site, the lower extremity being more common (Table 1).

Sarcomas are not encapsulated tumors but have a "pseudocapsule" of compressed malignant and normal cells. They frequently extend along fascial planes and nerve sheaths beyond the margins of the gross tumor. Thus, complete removal is difficult. Some sarcomas do not have clearly defined histologic features of malignancy; occasionally, this determination may be made only if metastases develop.

## Classification and Incidence

Liposarcomas represent 12 to 15% of all sarcomas and are the most frequent sarcomas in the retroperitoneum (Table 2).<sup>3</sup> They account for 21 to 30% of sarcomas and are five times more common than benign lipomas in this location. Peak incidence is in the 40 to 60 year age group, and they are virtually nonexistent in children.<sup>5</sup> They are prone to local recurrence after treatment with the recurrent tumor being more aggressive and likely to metastasize than the primary lesion.

Leiomyosarcomas are the second most common retroperitoneal sarcoma. They also occur in visceral organs, such as the GI tract and the uterus. In one series, they accounted for 33% of retroperitoneal sarcomas.<sup>6</sup> When located retroperitoneally, they are thought to arise from smooth muscle of blood vessels.

Fibrosarcomas represent approximately 15% of all retroperitoneal sarcomas and are the most common sarcomas in blacks.<sup>4</sup> They are usually more prevalent in the thigh and lower extremity.<sup>5</sup> They must be distin-

guished from fibromatoses (a benign connective tissue hyperplasia - dermoids).

Rhabdomyosarcoma is divided into four types (1) pleomorphic, the most common, (2) embryonal, the most common soft-tissue sarcoma in infants and children, (3) botryoidal, and (4) alveolar. Retroperitoneal rhabdomyosarcomas have a lower tendency for distant metastases but have a higher rate of local recurrence than extremity rhabdomyosarcomas. With the average survival after any type of recurrence being 20 weeks, initial treatment must be aggressive.

Malignant fibrous histiocytomas contain both fibroblast-like and histiocyte-like cells in varying proportions. Roughly 10 to 16% of these originate in the retroperitoneum, but they occur most commonly in the extremities. Size is a significant prognostic variable with almost a 50% recurrence with tumors greater than 5 cm in size. Approximately 30% of these tumors present with metastases (lung, lymph nodes and liver).<sup>3</sup>

## Clinical Manifestations

Due to the loose fatty tissue in the retroperitoneum, tumors may grow quite large before causing symptoms. Early symptoms are often absent or merely vague and nonspecific. As the tumor grows and enlarges, it may compress, obstruct or invade adjacent organs. It may obstruct and compromises function of the GI tract, the urinary tract or the vascular system. Thus, these tumors may produce symptoms of nausea, vomiting, jaundice, hematuria, urinary frequency, hydronephrosis or lower extremity edema. Patients may also present with an insidious weight loss or progressive abdominal enlargement. On physical examination, 30 to 80% of these patients will have a palpable, nontender abdominal mass.<sup>7</sup> One may also discover ascites, lower extremity edema or hemorrhoids.

## Diagnosis

If a retroperitoneal mass is suspected, an intravenous pyelogram will be abnormal in 60% of the cases. Barium enema and upper gastrointestinal series will rule



TABLE 1  
SUMMARIZED CHARACTERISTICS OF MOST COMMON VARIETIES OF SOFT TISSUE SARCOMAS

	Malignant Fibrous Histiocytoma	Liposarcoma	Rhabdomyosarcoma	Synovial Sarcoma	Angiosarcoma (Hemangio-endothelioma)
Sex	Male preponderance	Male preponderance	Slight male preponderance	Male preponderance (3:2)	Male preponderance
Age	All ages but especially sixth decade and beyond	All ages; median age, sixth decade	First two decades	30 (mean)	All ages
Common locations	Extremities and retroperitoneal	Gluteal region, thighs, and popliteal and retroperitoneal regions	Head, neck and trunk	Upper and lower extremities near joints	Extremities and trunk
Parent tissue of origin	Primitive mesenchymal cell, histiocytic and fibroblastic differentiation	Adipose tissue	Striated muscle	Synovium Primitive mesenchymoma	Endothelium
Gross characteristics	Firm or soft; pseudoencapsulated; grayish white	May be large; resembles brain tissue; often pseudoencapsulated	Soft; pseudoencapsulated; often hemorrhagic	Well-circumscribed; grayish pink to grayish white; calcific deposits rarely seen	Hemorrhagic mass
Microscopic characteristics	Storiform pattern Pleomorphic Histiocytic	Nucleus often compressed to crescentic shape by fat; cytoplasmic fat prominent with fat stains; Sudan IV and schiarlach red helpful in diagnosis of some liposarcomas	Three patterns; embryonal, alveolar, and pleomorphic	Biphasic form; gland structure and malignant stroma; monophasic; resembles fibrosarcoma; mucin and reticulin stains possibly helpful	Alkaline phosphatase and factor VIII possibly helpful

From del Regato JA, Spjut HJ, Cox JD: Ackerman and del Regato's Cancer: Diagnosis, Treatment, and Prognosis. St. Louis: Mosby, 1985.

out GI sources of the tumor and will frequently show displacement. For detection of a mass, abdominal CT scans produce the best yield. Ultrasound is less effective and may have a 15 to 30% rate of inadequate examination.<sup>8</sup> After the presence of a mass has been confirmed, a specific diagnosis may be made by biopsy of the lesion. Percutaneous needle biopsy may be performed, although excisional biopsy is preferred when possible.

Prior to initiating definitive therapy, a search for metastatic disease is performed. Pulmonary metastases may be demonstrated by chest x-ray and CT scan. Lymphangiography may be used to detect metastases in cases of tumors that frequently spread via the lymphatics (rhabdomyosarcoma, malignant fibrous histiocytoma and synovial cell sarcoma). If surgery is contemplated, angiography will complete the preoperative work-up. Although not essential in all cases,<sup>9</sup> angiography is useful to analyze the vascularity of the tumor, determine its relationship to blood vessels, determine the presence of hepatic metastases and define the anatomy of the area in preparation for surgery.

## Treatment

The preferred treatment of retroperitoneal sarcomas is wide *en bloc* resection. This includes the removal of any involved structures as 75% of these tumors will have invaded an adjacent organ.<sup>4</sup> In the procedure itself, the dissection of the medial margin will be most difficult because the principle blood supply to these tumors is located there.

The retroperitoneal location may preclude a wide three-dimensional excision. Simple enucleation increases the chances of tumor spread and thus decreases the chances for cure.<sup>2</sup> This is due to the invasive nature of these tumors and their microscopic spread along fascial planes and nerve sheaths. The margins of the tumor should be biopsied to document residual tumor. Metallic clips may be placed at the borders of the resection to guide future radiotherapy. Adjuvant chemotherapy as well as radiotherapy have been used in patients with these tumors.

TABLE 2  
CLASSIFICATION OF SOFT-TISSUE SARCOMAS\*

Cell of Origin	Type of Tumor	Subtypes
Fat cell	Liposarcoma Myxoid Round cell Pleomorphic	Well-differentiated
Fibroblast	Fibrosarcoma Poorly differentiated Dermatofibrosarcoma protuberans	Well-differentiated
Histiocyte	Fibroxanthosarcoma (malignant fibrous histiocytoma)	
Smooth muscle	Leiomyosarcoma	Leiomyoblastoma
Striated muscle	Rhabdomyosarcoma Botryoid Alveolar Pleomorphic	Embryonal
Osteoblast	Osteosarcoma Parosteal (juxtacortical)	"Classic"
Chondroblast	Chondrosarcoma	
Endothelium of blood vessels	(Hem) Angiosarcoma (malignant) Hemangiopericytoma (malignant)	Hemangioendothelioma
Endothelium of lymph vessels	Lymphangiosarcoma	
Synovial cells	Synovial sarcoma	
Pluripotential mesenchyme	Malignant mesenchymoma	
Ectoderm (peripheral nerve)	Malignant neurilemoma	
Uncertain	Alveolar soft tissue sarcoma Malignant granular cell tumor Kaposi's sarcoma Clear-cell sarcoma of tendon sheath and aponeuroses Epithelioid sarcoma (acidophilic fascial sarcoma)	

\*Modified from Ackerman, L.V., and Rosai, J.: The pathology of tumors, part four: grading, staging and classification of neoplasms. CA, 21:373, 1971.

## Results and Prognosis

The operative mortality for complete excision for retroperitoneal sarcomas has varied from 4 to 8%.<sup>1</sup> Many factors have been studied to discover any possible relationships to patient prognosis. The factors most consistently related to patient prognosis for all types of sarcomas were the histologic grade of the tumor and whether or not the patient had a complete excision.<sup>2,7</sup> The higher the grade and the more incomplete the resection, the lower the survival. For some tumors, such as malignant fibrous histiocytoma and leiomyosarcoma, tumor size is an important predictor of survival. For liposarcomas, the tumor subtype has an effect on survival with mean survival ranging from 24 months for the pleomorphic type to 119 months for well-differentiated liposarcomas. Poor survival figures are also related to the previously mentioned difficulties with the retroperitoneal tumors in general. These problems involve delayed patient presentation and diagnosis and the difficulty of surgically obtaining a complete resection.

Small numbers of patients with this uncommon disease process makes analysis of treatment results somewhat difficult. Studies of results are available, however, generally from large cancer centers. Cody *et al*<sup>7</sup> studied 158 patients with retroperitoneal sarcomas of all types. They defined "complete" resection as the removal of all gross tumor. Margins could be microscopically positive. Their patient population included those patients whose results were previously published by Fortner *et al*<sup>1</sup> as well as 80 additional patients who were treated subsequently. Their results were almost identical. For patients who underwent "complete" excisions, the five-year survival rate was 37 to 45%. However, half of these surviving patients had recurrence of their diseases so the five-year disease-free survival rate was only 20%. No adjuvant therapy was consistently used in this study. In a small uncontrolled subgroup of patients, radiotherapy was used and resulted in a small but statistically significant advantage over surgery alone. Using Cody's definition of "complete" excision, Adam *et al*<sup>10</sup> duplicated his results in a retrospective study using a small number of patients.

McGrath<sup>6</sup> defined his excisions as complete only when the margins of tumor were microscopically free of disease. His five-year survival rate was 70%. However, 60% of his patients who underwent complete excision developed a recurrence usually within five years. Too few patients with complete resections received adjuvant

therapy for the results of that added therapy to be analyzed.

Partial excision is generally defined as the incomplete resection of gross tumor. The results for this mode of therapy are uniformly dismal. Survival at five years without adjuvant therapy is 3 to 4% with McGrath showing no improved survival with adjuvant therapy.<sup>6,7</sup>

Use of adjuvant therapy has been stimulated by the poor results of surgical therapy alone. Wood *et al*<sup>11</sup> reviewed the results of removal of gross tumor with a 1 cm margin of normal tissue combined with pre- and postoperative radiotherapy (total 6,000 rads). He had a 65% survival rate at five years with a disease-free survival rate of 58%. However, this group of patients included some patients with tumors of the extremity, which have been shown to have an improved survival compared to retroperitoneal tumors.<sup>12</sup>

Glenn *et al* prospectively studied 37 patients with retroperitoneal sarcomas.<sup>13</sup> These patients underwent resection of all gross tumor and also received postoperative radiotherapy. They were then evaluated for response to adjuvant chemotherapy. They utilized a regimen proven to be effective in sarcomas of the extremity. This regimen consisted of doxorubicin, cyclophosphamide and high-dose methotrexate. Rosenberg *et al*<sup>14</sup> has shown this combination of agents to improve disease-free survival at three years in patients with sarcomas of the extremities from 60 to 92% with overall survival improved from 74 to 95%. Overall survival in Glenn's group was 23% at five years and was unaffected by the use of chemotherapy. Additionally, major morbidity was associated with the use of chemotherapy in these patients. No conclusions could be drawn concerning the use of radiotherapy.

Tepper *et al* reviewed the results of the use of radiotherapy along with complete surgical excision (negative margins), incomplete excision, or radiotherapy alone.<sup>15</sup> He produced a five-year survival rate of 54% and an equal rate for control of local disease at five years. However, the number of cases in this study was small.

## Summary

Retroperitoneal sarcomas are generally advanced tumors when they present for diagnosis and treatment.

The treatment of choice is *en bloc* excision of the tumor and any involved organs. Survival is poor with less than half of the patients surviving five years. Of these survivors, 50% will have had a recurrence of their disease. Adjuvant chemotherapy is ineffective in prolonging survival in these patients. Radiotherapy while improving survival in small numbers of patients requires further study to be proven beneficial in all patients.

- References** 1. Adams JT: Abdominal wall, omentum, mesentery, and retroperitoneum. In: Schwartz SI, ed. *Principles of Surgery*, 4th ed. New York: McGraw-Hill, 1984, pp 1449-1452. 2. Leffall LD JR: Soft tissue sarcomas. In: Sabiston D, ed. *Textbook of Surgery*, 13th ed. Philadelphia: WB Saunders, 1986, pp 522-528. 3. Enterline HT: Histopathology of sarcomas. *Semin Oncol* 8:133-159, 1981. 4. Fortner JG, Martin S, Hajdu S, Turnbull A: Primary sarcoma of the retroperitoneum. *Semin Oncol* 8:180-185, 1981. 5. Stout AP: Sarcomas of the soft tissues. *CA* 11:210-231, 1961. 6. McGrath PC: Improved survival following complete excision of retroperitoneal sarcomas. *Ann Surg* 200:200-204, 1984. 7. Cody HS, Turnbull AD, Fortner JG, Hajdu SI: The continuing challenge of retroperitoneal sarcoma. *CA* 47:2147-2152, 1981. 8. Lindell MM: Diagnostic techniques for the evaluation of soft tissue sarcoma. *Semin Oncol* 8:160-171, 1981. 9. Das Gupta TK, Brashfield RD: Soft tissue tumors: Classification and principles of management. *CA* 18:259-263, 1968. 10. Adam YG, Oland J, Halevy A, Reif R: Primary retroperitoneal soft tissue sarcomas. *J Surg Oncol* 25:8-11, 1984. 11. Wood WL, Suit HD, Mankin HJ, Cohen AM, Proppe K: Radiation and conservative surgery in the treatment of soft tissue sarcomas. *Am J Surg* 147:537-541, 1984. 12. Shiu M, Castro EB, Hadju SI, Fortner JG: Surgical treatment of 297 soft tissue sarcomas of the lower extremity. *Ann Surg* 182:597-602, 1975. 13. Glenn J, Sindelar WF, Kinsella T, Glatstein E, Tepper J, Costa J, Baker A, Sugarbaker P, Brennan MF, Sepp C, Wesley R, Young RC, Rosenberg SA: Results of multimodality therapy of resectable soft tissue sarcomas of the retroperitoneum. *Surgery* 97:316-324, 1985. 14. Rosenberg RA, Tepper J, Glatstein E, Costa J, Young R, Baker A, Brennan MR, Demass EV, Seipp C, Sindelar WF, Sugarbaker P, Wesley R: Prospective randomized evaluation of adjuvant chemotherapy in adults with soft tissue sarcomas of the extremities. *CA* 52:424-434, 1983. 15. Tepper JE, Suit HD, Wood WC, Proppe KH, Harmon D, McNulty P: Radiation therapy of retroperitoneal soft tissue sarcomas. *Int J Radiat Oncol Bio Phys* 1016:825-830, 1984.

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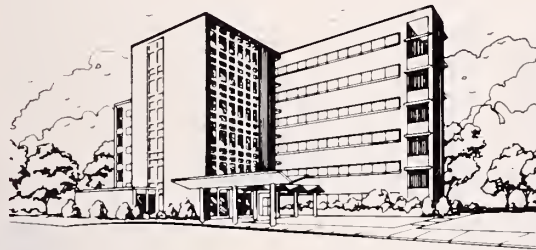


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### **Newer Approaches to Geriatric Care The Multidisciplinary Assessment Team**

**S. PHILIP GREIVER, M.D.**

**T**here are many instances of the advantages of the team approach to the care of our older patients. The surgical suite with its anesthesiologist, nurse, and surgical assistant plus the multiple background support personnel supplying needed equipment and supplies is a prime example. The student, intern, resident, attending, team nurse, and nurse coordinator in many teaching hospitals is another interdisciplinary form of team to provide a safety net to catch the multiplicity of problems these patients usually present. Certainly in the state of Kentucky the well known attributes and results derived from members of a smoothly coordinated team bouncing a round ball on a hardwood floor need hardly be further expounded.

In the care of the elderly patient, a multidisciplinary team, under the supervision and guidance of the primary physician, is possibly the best form of care available. The elderly patient brings to the physician a multiplicity of chronic ailments, a lack of focus on a particular problem, and a confusing set of symptoms and findings, partly due to their weariness in previous life experience and partly due to their weariness in previous oriented approach, and latent or insidious "ageism." This latter prejudice is thought partly to be present in many of us because of our own fear and reluctance to face the inevitability of growing old and dying.

Unreported disabilities in the geriatric population range from 75% vision/hearing; 36% locomotor; 35% foot disability; 25% dementia; and 15-20% hospitalized patients to be frankly depressed when appropriately tested.

#### **The Team Approach**

The Team Approach, therefore, is the intervention which is thought to be able to improve the functional outcome of the elderly patient under the care of a private physician, with the help of a multidisciplinary team.

This team usually consists of at least a geriatric nurse clinician, dietician/nutritionist, physical and/or occupational therapist, social worker and includes others as indicated and needed; such as psychologist, pharmacist, audiologist, podiatrist, ophthalmologist, geropsychiatrist, dermatologist, etc. Members of the team establish their findings by means of a careful assessment of the patient using well established assessment tools. For instance, the mini-mental-status (MMS) examination which with only six brief questions gives a great deal of verifiable information about cognitive dysfunction in the patient. The assessments are then shared, exchanged, and compiled in order to provide a functionally based treatment, care, and discharge plan within a short time of the patient's admission to the hospital. The members of a truly talented assessment team bring to the patient's problem their observations and recommendations in their particular areas of specialty and complement the physician's knowledge of the patient's general, medical, physical and mental state. This team can present the general psychological, financial and social problems of the patient at regularly scheduled team meetings to share, compare and discuss their findings and design a medical, social and financial plan targeted at specific problems which caused the admission, and aimed at discharging the patient at an increased level of function.

Because physicians are cure oriented in their training, it may be difficult to accept improvement in functional outcome or the maintenance of the highest degree



of function in patient, and/or alleviation of discomfort as the goal of therapy. But this is indeed the best that sometimes can be accomplished. The geriatric cliché "it is easier to treat a failing heart than it is to treat an older patient who has heart failure," is often true because of the multiple chronic problems with which the patient often presents. Because of the lack of or limited family support system occasionally seen, and the limited economic resources, plus the psychological and social economic problems which are part of the baggage of many elderly patients, the cure-oriented approach alone does not seem appropriate.

The physician must be comfortable and skillful in coordinating his team and must view the team as a therapeutic instrument to be used for the good of the patient. No patient is likely to require the help of all of the core team and ancillary members available, but it is also true that no physician can perform all of these roles expertly. He should define his own role as the leader of the team, but accept and value the input of his professional allies in related fields of health care in reaching decisions about diagnosis, function, treatment, prognosis, morale, education and discharge recommendations.

## Results

The assessment team approach has been used in Great Britain and Canada for many years before its more recent entry into this country. In studies in geriatric units using this approach, many improvements in diagnosis, reduction in complications and increased discharges to home and community have resulted. Various studies have reported a finding of two to four new treatable conditions, the finding of one new major psychiatric condition, the reduction of up to 43% in the number of prescription drugs taken, and considerable reduction in post operative complications.

The objective is to improve or maintain the patient's function and to return the patient to home or community as often as possible providing whatever home health care aids and professional assistance might be needed.

This certainly is a much higher order of cost effectiveness than the DRG push to move the patient out of the hospital sicker and quicker.

The interdisciplinary team has to be large enough to be effective and small enough to be efficient. We as physicians must recognize the requirements of comprehensive care and welcome the collaboration of persons trained to professions other than medicine.

## Conclusions

The Multidisciplinary Team can be an effective instrument in the care of the elderly patient by the caring physician most interested in providing comfort to and sustaining the independence of their older patients.

**References** Besdine RW: The Educational Utility of Comprehensive Utility of Comprehensive Functional Assessment in the Elderly. *J Amer Geriatric Soc Issue*: 651-656, 1983. **2.** Evaluating the Elderly Patient: The Case for Assessment Technology. NIH Technology Conference, June 1983. **3.** Gaitz CM, MD, Wilson NL, MA, Presentation at Conference, Boston, October 14, 1985. **4.** William J. *Lancet*, 1:1117, Care of the Elderly Interdisciplinary Team, 1964. **5.** Rubenstein, L: The Clinical Effectiveness of Multidimensional Geriatric Assessment. *J Amer Geriatric Soc* 31:12, 1983. **6.** Schrier Robert W, MD, Clinical Internal Medicine of the Aged. W. B. Saunders Company, 1982.

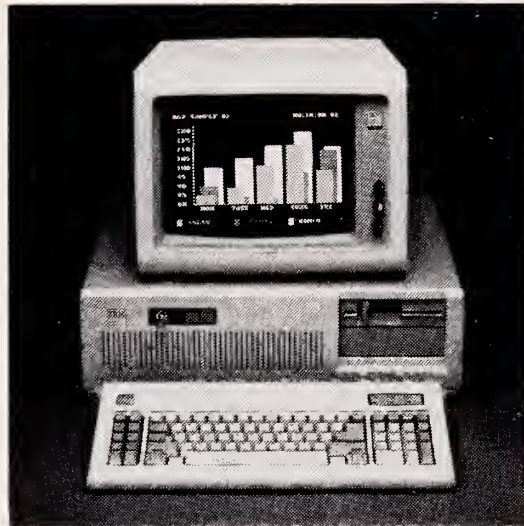
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## LETTERS

*The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532*

*Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the Journal. Names will be withheld upon request, but anonymous letters will not be accepted.*

### To The Editor:

*Foreign medical graduates make up 20% of the nation's and 15% of Kentucky's physicians. They are represented in primary care, in the specialties and in academic practice. Requirements for immigration and for obtaining medical licensure are increasingly stringent.*

Amid patriotic speeches and spectacular fireworks, America celebrated its independence and unveiled the Statue of Liberty in its centennial glory. We are a nation of immigrants, from whose diversity greatness stems. No longer are immigrants processed at Ellis Island; rather they come by air, sea or land to become part of this country of promise and opportunity.

Among these hopefuls is a group that have devoted their lives to the study of medicine. They come for various reasons from the old countries of Europe, from the developing, and sometimes poor countries of the East and Middle East, and from Latin America. These physicians must undergo a rite of passage before they take their place with their established American colleagues. A Foreign Medical Graduate (FMG) is a physician whose basic medical degree was conferred by a medical school outside the U.S.A., Canada or Puerto Rico. A related group includes U.S. citizens who have gone to such schools and are designated as U.S. foreign medical graduates (USFMGs).<sup>11</sup>

21.6% or 112,005 of 519,545 licensed physicians in the U.S. in 1983 were graduates of foreign medical schools.<sup>11</sup> Eighty percent of them are in the primary specialties of internal medicine, general surgery, pediatrics, and obstetrics-gynecology, and in four non-primary care fields of pathology, psychiatry, anesthesia, and rehabilitative medicine.

FMGs were once encouraged to emigrate to this country to fulfill a need. In 1965, President Johnson declared that there was a shortage of doctors in the U.S. Physicians were placed on the Department of Labor's list of occupations in short supply, enabling them to be

granted a labor certification when applying for an immigrant visa. From 1961 to 1976, 60,000 physicians entered the U.S. on temporary visas. Half of these were converted to permanent visas under the then existing laws established by Congress.<sup>6</sup>

However, with a shortage of doctors no longer an issue, in 1976, Congress enacted PL94-484 placing a limitation on immigration of foreign physicians.<sup>11</sup> This law required foreign national physicians to pass the Visa Qualifying Examination (VQE) and an English test before being issued a visa to immigrate.<sup>48</sup>

Once in this country, a physician must obtain a license in order to practice medicine. The FMG must fulfill the following prerequisites for medical licensure:

1. Proof of graduation from a school listed in the World Directory of Medical Schools, published by the World Health Organization.
2. Possession of a certificate issued by the Educational Council of Foreign Medical Graduates (ECFMG).
3. Being accepted to and eventually finishing an accredited post-graduate training program (selectively waived).
4. Fulfilling the requirements for and passing the Federation Licensure Examination (FLEX).

What problems do FMGs encounter to comply with requirements?

1. Despite being listed in the World Directory of Medical Schools, some Licensure Boards reserve the right to determine if that school meets its standards. This review can be an involved and lengthy process.
2. From being a one-day test of medical knowledge, the ECFMG test evolved in 1984 into the Foreign Medical Graduate Examination in the Medical Sciences (FMG EMS), a two-day test equivalent to the National Board of Medical Examiners, Parts I and II examination. This includes passing the Test of English As A Foreign Language (TOEFL). Of 187,900 foreign nationals taking the test between 1969 thru 1982, 56.7% passed, and of 17,642 U.S. natives 71.8% passed.<sup>7</sup>



TABLE I					
Distribution of residents in training.					
Year	Total # of residents on duty	#FMGs	%FMGs	#USFMG	%USFMG
1973	53,777	19,097	32.4	300	1.5
1981	69,738	13,194	19.4	5,838	8.3
1982	70,523	13,123	19.0	6,388	9.0
1983	72,397	13,221	18.4	6,990	9.6
1984	75,125	13,525	18.0	7,385	10.3

TABLE II		
Specialties of FMGs: Kentucky 1985		
Total # of Physicians: 5,959 # of FMGs: 921		
Specialty	Number	Percent
Internal Medicine	142	15.4
Psychiatry	94	10.2
Surgery	89	9.6
Anesthesiology	81	8.8
Pediatrics	75	8.1
Family Practice	60	6.5
General Practice	50	5.4
Radiology	49	5.4
OB/Gyn	40	4.3
Emergency Medicine	36	3.9
Pathology	33	3.5
Orthopedic Surgery	25	2.7
Neurology	17	1.8
Administrative Medicine	0	0.0
All Others	126	14.0
Specialty not specified	4	.4
	921	100.0

TABLE III			
University of Louisville School of Medicine Faculty			
	Total	FMG	%FMG
Full Time	333	53	16
Department Heads	19	3	16
Full professors	97	18	19
Associate professors	106	15	14
Assistant professors	85	14	16
Instructors	45	6	13

the National Boards or electively the FLEX and are granted full licensure after one year of approved training.) Some states (Tenn., West Va., etc.) however, require that the FLEX be taken in one sitting, hence physicians must take the FLEX over if one wishes a reciprocal license from that state.<sup>10</sup>

In 1972,<sup>6</sup> half of the candidates for licensure examinations in the U.S. were FMGs. Their pass rate was 65%, compared to 88% for U.S. medical graduates. Pass rates of FMGs varied among states: 94% passed in Pennsylvania between 1965–70, 63% in New Jersey, 60% in Maryland, 57% in Ohio, and 46% in New York.<sup>6</sup>

In Kentucky, 15.8% or 921 of the 5,959 licensed physicians are FMGs, compared with the national average of 20%. Distribution of specialties is shown on Table II.

This follows the general trend of specialty distribution among FMGs in the nation except for rehabilitative medicine, represented by three physicians, which is less than 1% and included in the category "All Others." Nationally, 33% of residents training for this specialty in 1984 were FMGs.<sup>2</sup> In Kentucky, the only category without an FMG was administrative medicine, with six U.S. medical graduates or 0.1% in that field.

To investigate the Kentucky FMG's involvement in academia, the University of Louisville School of Medicine Faculty roster was examined. See Table III. The results indicate that FMGs are proportionally represented in the teaching field in one of the two Kentucky medical schools.

### Discussion

Nationwide, FMGs make up a significant proportion of the medical profession. They have shared the burden and the bounties of caring for the health of the nation. In the process they have become amalgamated and part of the whole. Their talents and successes, as well as their failures, reflect on the profession.

3. Acceptance rate to accredited training programs is seen in Table I.<sup>3,4</sup>

In 1973, one-third of residents in training programs were graduates of foreign medical schools. This percentage steadily decreased so that 10 years later, in 1983, less than one-fifth were from foreign schools, half of which were USFMGs. In 1984, of the 18% of all FMG residents-in-training, 10% were USFMGs and only 8% were from another country.

4. Fulfilling requirements and passing the FLEX: Every state has their variations of given requirements. In Kentucky, as of June 1, 1985, FMGs who have passed the FMGEMS are eligible for the first component of the FLEX after one year of accredited post graduate training or being currently enrolled in a residency program in Kentucky. After passing this test, an institutional license is issued. One may sit for the second FLEX component after another year of training. A full license is issued after three years of approved residency. (U.S. medical graduates generally take

## Letters

Medicine, traditionally a difficult profession to pursue, has become more so now because of decreasing availability of residency positions and more stringent entry requirements. The FMG, regardless of origins, has been more vulnerable in this respect. It is a comfort to know that those who obtain licensure have passed through a rigorous screening procedure that meets the standards by which all practitioners of medicine are gauged.

One wonders, however, if the pendulum can swing too far in the other direction, compromising both fairness and equality in granting all physicians the right to practice. If so, American medicine could miss out on a lode of talent waiting to be mined and put to use.

**References** 1. "Vital Statistics," World Almanac, 1985, Newspaper Enterprise Association, Inc. 2. "35th Annual Report on Medical Education in the U.S. 1984-85", *JAMA*, Sept. 1985, 254:1586-1592. (Tables 6, 9, & 10). 3. AMA Directory of Approved Residencies, 1974-75, p. 25, Table 1-f. 4. AMA Directory of Residency Training Programs, 1984-85, pp. 88, 91, & 92. (Tables 8, 11, & 12). 5. Ky. Board of Med. Licensure, Ky. Medical & Osteopathic Practice Act, June 1, 1986, p. 18. 6. Donesa, Antonio MD & Patricio Mamot, PhD. The Dynamics of Political Participation. "AMA News Release — FMG in American Practice", p. 171-174, "How Foreign Medical Graduates Perform on Board & Licensure Exams — Roland J. Knofel, PhD", p. 265. 7. Dublin, Thomas D, B Bloom, K Knorr, & R Casterline. "Where Have All the Students Gone", *JAMA*, Jan. 1985, 253: #3, p. 379. (Table 3). 8. 1985 Information Booklet and Application FMGEMS & ECFMG English Test. 9. "How to Get Your License, a State by State Guide", Resident and Staff Physician, May 1985, 32: #5, pp. 89-126. 10. AMA Directory of Residency Training Programs, 1985-86, p. 576. (Table 5). 11. Graduate Medical Education of Foreign Medical School Graduates in the U.S. June 1986.

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**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms (including convulsions) reported after abrupt cessation of extended use of excessive doses are similar to those seen with barbiturates. Milder symptoms reported infrequently when continuous therapy is abruptly ended. Avoid abrupt discontinuation; gradually taper dosage.

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Due to isolated reports of exacerbation, use with caution in patients with porphyria.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. **Oral—Adults:** Mild and moderate anxiety disorders and symptoms, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. **Geriatric patients:** 5 mg b.i.d. to q.i.d. (See Precautions.)

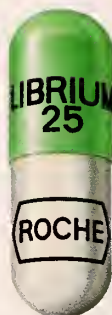
**Supplied:** Librium® (chlordiazepoxide HCl/Roche) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in boxes of 4 reverse-numbered cards of 25, and in boxes containing 10 strips of 10. Libritabs® (chlordiazepoxide/Roche) Tablets, 5 mg and 10 mg bottles of 100 and 500; 25 mg—bottles of 100. With respect to clinical activity, capsules and tablets are indistinguishable.

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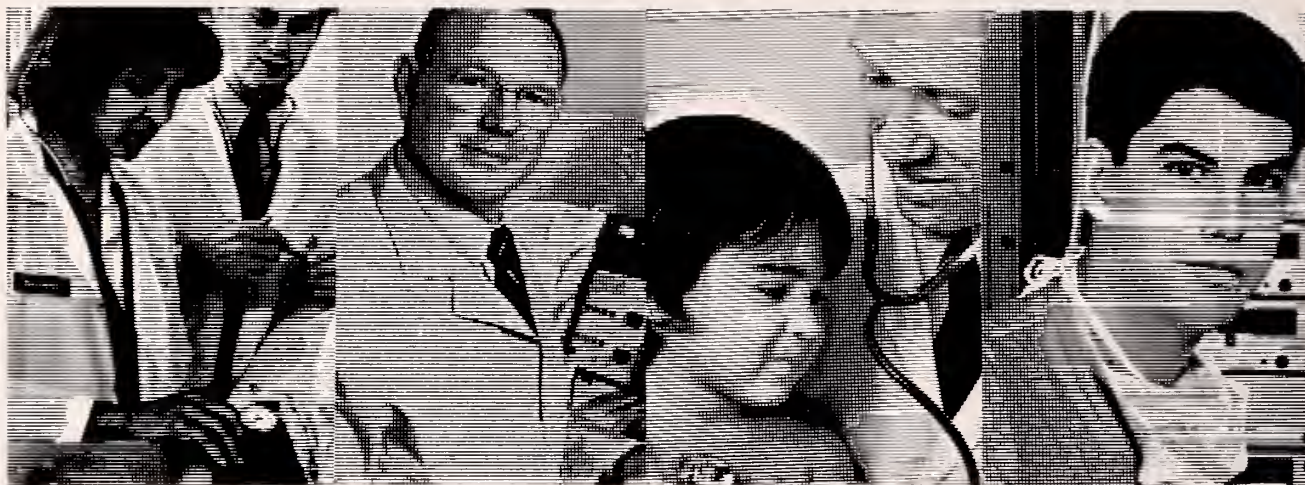


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# **Interprofessional Code**

## **KENTUCKY MEDICAL ASSOCIATION**

### **AND**

## **KENTUCKY BAR ASSOCIATION**

### **Revised October 16, 1984**

### **PREAMBLE**

#### **General Principles**

Doctors of medicine and attorneys at law, as members of two professions possessing a close personal relationship with those they serve, have established principles of ethics applicable to the traditions and requirements of their respective callings.

The physician has responsibility for the care of the individual, in health as in disease. He must minister to his patient's needs to the best of his ability and in accordance with the high precepts of the Hippocratic Oath.

The attorney is an officer of the court, sworn to support the Constitution of the United States and of the state or states in which he is admitted to practice. As is the physician, he also is pledged to maintain the confidence and to preserve inviolate the secrets of his clients. He will not reject, from any consideration personal to himself, the cause of the defenseless or oppressed, nor delay any man's cause for lucre or malice.

The attorney represents his client as advisor and confidant, as his advocate in legal proceedings and as negotiator in the business and personal affairs of his client. The physician's relationship is parallel, for he is also the advisor and confidant of his patient in matters of health.

#### **Interprofessional Relations**

Each profession is obligated by its own stature to respect and honor the calling of the other. Neither the fact nor the appearance of incompetence, corruption, dishonesty, or unethical conduct on the part of individual members of either profession can be tolerated. It follows then that each profession must vigorously support within its own ranks, as well as in the ranks of the other, those ethical concepts which each has found necessary in the public good. One who has chosen to be a

physician or an attorney and has been found competent to be such by appropriate authorities, is vested with high responsibilities and privileges to enable him to serve the public with honor, with dignity, and with effectiveness.

#### **This Code**

A statement of ethical principles states a guide to the attainment of the best in interprofessional conduct and practices. IT IS NOT NECESSARILY OF A BINDING CHARACTER, NOR CAN IT BE SO DETAILED TO COVER EVERY CIRCUMSTANCE.

This Interprofessional Code constitutes the further recognition that with the great developments in the science and art of both medicine and law, it is inevitable that the physician and the attorney are drawn into steadily increasing association, as the law calls with increasing frequency upon medicine for its scientific knowledge and for its evaluation of facts so that the rights of individuals and of the government may be appropriately determined before various tribunals.

#### **I. RECIPROCAL DUTIES**

##### **A. THE ATTENDING PHYSICIAN AND HIS PATIENT**

The medical profession affirms the obligation of a patient's attending physician to cooperate willingly with the patient's attorney in supplying facts, primarily available only to him. The physician should accept the further responsibility of explaining such facts in such a manner that the attorney understands them and can determine their relationship to his client's cause. There should be complete cooperation between the physician and the attorney, each assuming his proper responsibility.



It is for the physician to determine the actuality or probability of fact pertaining to his patient's medical condition. It is for the attorney to determine how and under what circumstances such facts are to be appropriately presented.

A physician should never advise on the amount of damages a patient should seek to recover. The proper province of his professional advice is the extent, degree, or percentage of illness, injury, disability, or similar judgments based upon his professional knowledge of the case. He is not expected to understand technical rules of legal liability, or evidence, or of trial techniques. The latter are the exclusive province of the attorney.

## B. THE ATTORNEY AND HIS CLIENT

It is a part of the attorney's oath on his admission to the bar of this state that he will not counsel or maintain any suit or proceeding which shall appear to him to be unjust, or any defense, except such as he believes to be honestly debatable under the law of the land. He will employ, for the purpose of maintaining the causes confided to him, such means only as are consistent with truth and honor and will never seek to mislead the judge or jury by any artifice or false statement of law or fact.

In discharge of that oath, it becomes the attorney's responsibility to marshal the facts and to obtain professional and other opinion which, in his judgment, are necessary for his client's case and in a manner consistent with his oath and the ethics of his profession.

It is important that the physician understand that legal proceedings in this country are conducted under what is known as the "adversary system." Under that system the attorney occupies a dual position. He is not alone an officer of the court. He is also the single-minded advocate for his client. He does not and cannot properly represent both sides to a dispute.

This system has developed in recognition of the truth demonstrated countless times that justice can usually be satisfactorily accomplished if the two or more contestants can present their point of view to some neutral third person who can weigh the opposing claims. Such claims are usually presented in the form of testimony which is offered in question and answer form. The judge of a court or the officer presiding before an administrative tribunal is the referee who weighs the opposing points of view and the conflicts in testimony. In a sense the judge or administrative officer much more nearly approximates the physician in objectivity. The physi-

cian well knows, however, that in some situations it is also possible for medical men to vary honestly and sincerely in their physical findings, their treatment, and their evaluation of illness or injury. In some types of court cases the parties prefer to let a group of sworn but interested citizens, the jury, weigh and "find" the facts.

## II. MEDICAL EXAMINATIONS

(Requested by Attorneys or ordered by Court)

### A. GENERAL

1. The law provides that a party to a lawsuit may be required to undergo a medical examination by agreement of the opposing attorneys or under a court order.

2. When an appointment is made for the medical examination of a person, the physician sets aside a part of his day for that purpose. It is, therefore, important that attorneys exert their best efforts to insure that such appointments are kept. The attorney for the party to be examined should give explicit instructions to such party that the physician must be notified in ample time should it become impossible for the party to keep the appointment.

### B. SCOPE OF EXAMINATION

1. The physician may take a history and perform such examinations as may be advisable in his judgment to formulate an informed opinion regarding the nature and extent of the party's medical condition.

2. Inquiries should not be made by the physician into matters not reasonably related to the legitimate scope of the medical examination.

3. The physician, following his examination, shall reduce to writing a medical report, following the outline set forth in Section III.B.5. herein. The original report shall be forwarded to the court or person requesting the examination, with copies as directed by the court or by the person requesting the examination.

## III. WRITTEN MEDICAL REPORTS

(Prepared for Courts or Attorneys)

### A. THE ATTORNEY

1. Requests for reports from a physician should be made in writing as soon as it is known that the information is needed. The request should be clear as to the specific information desired and the report should be prepared by the physician as promptly as possible.



2. If a report is requested on a physician's patient, the attorney must provide the physician with a written authorization from the patient.

## B. THE PHYSICIAN

1. **Medical Records.** The physician must keep records adequate to supply a patient's attorney all pertinent information regarding the patient-client's medical history.

2. Requests for medical reports should be honored promptly. Undue delays in providing medical reports of bills bearing on a patient's legal rights may prejudice his case.

3. If a physician is unable to make a complete medical evaluation within the time required, he should notify the attorney. In this event, a preliminary report clearly designated as such may serve the attorneys needs until a complete evaluation can be rendered.

4. **Patient's Authorization.** The physician must have his patient's written authorization before releasing any report or test concerning the patient. Such authorization is not necessary when the person examined is not a patient of the physician, and the examination is made in connection with a legal claim.

5. **Content of Report.** The following, where applicable, should be included in the report:

- a. Time, date and place of first visit.
- b. Accurate history of the injury or medical condition, including pre-existing disease or prior injury.
- c. Nature of examination and findings.
- d. Results of laboratory work, x-rays, and consultations.
- e. Opinion including, where possible, diagnosis and prognosis. **Upon request**, the opinion should also evaluate future physical impairment, necessity for future treatment or surgery, the effect of aggravation of any pre-existing disease or prior injury, and length of convalescence. The opinion should likewise include the physician's true opinion on the cause of the patient's condition, and the strength of his opinion in evaluating the cause. In this regard, he should consider and state all objective and subjective matters bearing on this opinion, including, where appropriate, his evaluation of the patient's candor when considered in the light of his own medical knowledge.

f. State if patient's condition is stationary, or if the patient is discharged.

g. Subsequent examination: Include complaints and evaluation of condition, nature of treatment, confinement to hospital or home, referrals to other physicians, patient's progress, results of x-rays, ECGs, EEGs, laboratory work and consultations, and a concluding diagnosis and prognosis (see Item e, above).

h. Enclose separately an itemized statement of medical expense to date. Omit charges for medical reports or attorney consultations or ANY REFERENCE TO INSURANCE.

i. Include estimate of cost of future medical care.

## IV. CONFERENCES

The physician and the attorney should confer relative to the common problems presented in a particular case. Such conferences should be arranged well in advance of court or other hearing at the mutual convenience of each, in full appreciation that to each profession, time is of the utmost importance. No physician and no attorney should be required to spend unnecessary time in arranging or attending such a conference. The attorney who knows and understands the progress of his client's case, the conflict, if any, of its medical aspects, and the probability of settlement or trial should determine the necessity of a conference.

**It is unfair to the patient-client, the physician, and the cause of justice to present a medical witness who has not first conferred with the attorney and who, therefore, may lack a full appreciation of the significance to the case of the particular evidence he is being asked to give. It is equally obvious that the attorney is less able to represent the full interest of his client where he has not had the advantage of full conferences with the physician in advance of presenting the case.**

## V. DEPOSITIONS AND/OR COURT APPEARANCE

Our system of justice depends on being able to require any citizen's time at a judicial proceeding and to give testimony regarding the case. A conference should be held between the physician and the attorney proposing to call him as a witness at some time mutually convenient before the physician is to testify.

## A. COURT TESTIMONY

Both parties recognize that when it has been determined that the just and proper effect of a physician's testimony cannot be obtained without an oral examination in court, there is a necessity for the dissemination of information of both professions concerning the time problems involved in court testimony. The Medical Association recognizes that the legal profession faces calendar problems, which include the uncertainty of dates in a fluid trial calendar. The Bar Association likewise recognizes that the physician's appointments are made in advance and that physicians are in addition faced with pressing medical problems which sometimes cannot be deferred.

### 1. Attorney's Duties:

a. The attorney should ascertain whether the physician will be available for a trial term prior to the date assigned for trial at that term. He should not order the attendance of a physician as witness unless necessary and in any case without prior notice and conference concerning the matters as to which he is to be interrogated unless both the attorney and the physician agree that such conference is unnecessary.

b. The attorney should write to the physician immediately following the docket call to advise the physician of the proposed trial date.

**c. The attorney should keep the physician's office advised of the status of the docket and notify the physician as soon as possible prior to trial of the probable trial date.**

**d. In the event of settlement or postponement, the physician should be immediately notified of that fact.**

e. The attorney should give the physician as much notice as possible of the time when his attendance in court is desired. Physicians should not be asked to appear until the attorney is reasonably certain that they will not have to remain at the courthouse more than a short period of time before being allowed to testify. When the physician enters the court room, he shall, through a court attendant, make his presence known to the attorney trying the case. The attorney shall endeavor to put the physician on the stand as soon as possible after his arrival in the court room subject to orderly and proper presentation of the case.

## 2. Physician's Duties:

a. The physician has a moral and ethical obligation to give testimony regarding his patient. If the physician undertakes the care of a patient and litigation ensues, the physician should recognize his responsibility to testify as to the medical condition of that patient, subject to the provisions of the Agreement.

b. When given adequate notice of the time when he will be called upon to testify, the physician should make himself available at that time, unless an emergency situation arises which precludes his appearance.

## B. DEPOSITIONS

**1. Physician-Patient Privilege.** Where testimony is given and documents are called for by counsel during the taking of depositions in personal injury lawsuits, the usual obligation of confidence in the physician-patient relationship does not exist, and physicians shall furnish any and all pertinent documents, reports, records, notes or x-rays regarding the patient which are requested by counsel for either party to the lawsuit.

**2. Deposition Defined.** A deposition is an official proceeding authorized by law whereby a physician may be required to give testimony and be cross-examined under oath outside of court before a court reporter who is a notary public and in the presence of attorneys representing the parties. He may be requested to produce pertinent medical records at the deposition hearing. He may also be requested to release the records, x-rays, ECGs, EEGs, etc. to the notary public for duplication and return.

**3. Time and Place.** The time and place of the deposition should be set by agreement with the physician. Unless there is a compelling reason to the contrary, it should be taken at the physician's office **at the time agreed, keeping in mind that an attorney's time has the same value as a physician's.**

**4. Subpoenas—Medical Records.** Production of pertinent medical records may also be required by subpoena duces tecum served on the physician. That subpoena requires the physician to attend the deposition at the time and place stated in the subpoena, and there to produce the specified records.

**5. If Attendance at Deposition A Hardship.** If the time and place described in the subpoena for the deposition creates a hardship, the physician should immediately bring this fact to the attention of counsel taking the deposition.



## 6. Preparation and Deportment

a. The Physician. Since the testimony given at deposition hearings may be read at the trial, it is important that the physician prior to deposition prepare himself as for trial and that his attitude and deportment at the deposition hearing be similar to that at trial.

b. The Attorney. An attorney should totally prepare his case from the medical-legal standpoint so that with a careful use of words he can reduce the area of misunderstanding. It is not proper for an attorney to seek to color the professional opinion of the physician. No attorney is justified in abusing, badgering or browbeating any witness, including a physician.

7. **Familiarity with Records.** The physician and the attorney should be thoroughly familiar with their own records and with other related records, including hospital charts and records, at the time the deposition is taken and should have as many of the records at the time the deposition is taken as is possible so that they may be referred to as needed.

8. **Predeposition Conference.** It is to be understood that it is proper to have a predeposition conference between the attorney for the patient and the physician to facilitate the taking of the deposition.

NOTE: If court testimony or a deposition of a physician cannot be set by agreement, the physician's attendance can be required by appropriate legal process. If any doubt arises as to the effect of such legal process, the physician should consult his attorney. A physician should not take offense at being served with a subpoena in the event an agreement cannot be made.

## VI. COMPENSATION FOR MEDICAL REPORTS, DEPOSITIONS, COURT APPEARANCE AND OTHER SERVICES.

It is impractical to establish precise rules governing a physician's fees for medical reports, reviewing medical records, conferences, opinions, depositions, court appearances, copies of medical records and other services. It is important, however, that fees be reasonable and that they be discussed in advance by the physician and the attorney. In this way, the major cause of misunderstanding and dissatisfaction will be eliminated. Generally, the attorney who requests these services of a physician is primarily responsible for prompt payment of the physician's reasonable fees. **Under no circumstances may a physician charge a fee for such services which is contingent upon the result of the lawsuit.**

As a matter of policy an attorney should not request a physician to testify on deposition or in court, nor should he subpoena him, without making arrangements for reasonable compensation. This is not required by law, but is suggested as a matter of fairness and cooperation between the professions. A physician should be compensated for the time spent away from his professional practice, regardless of whether he is used as a witness.

## VII. COMPENSATION FOR MEDICAL TREATMENT TO THE PATIENT

A. The patient, not his attorney, is responsible for paying all bills incurred by the patient for his medical care. While bills should be sent to the attorney on the attorney's request, this does not make the attorney responsible for their payment.

B. When the attorney first obtains a written authorization from his client for the release of medical information, the attorney should request his client to authorize the attorney to take out of the proceeds of any recovery by way of settlement or verdict the funds necessary to pay the physician's then outstanding bill for medical treatment. Upon such authorization being given, the attorney should so inform the physician. Upon recovery, if any, the attorney should, in every case, seek to protect the interest of the physician and see that the physician's bill is paid. In the event there is no recovery, or the recovery is insufficient to pay the bill, the attorney should so inform the physician.

(For suggested form, see Appendix A)

## VIII. IMPLEMENTATION OF THE CODE

The purpose of this Code is to establish, maintain and perpetuate a greater degree of understanding and ethics between the respective medical and legal professions. Any abuse of this Code or violations thereof by a member of either profession should be brought to the attention of the Physician-Attorney Liaison Committee for a determination to be made as expeditiously as possible.

Notice of the nature and pendency of the complaint shall be given to the person about whom the complaint is made.



## *IX. AMENDMENTS*

This Code may be amended from time to time upon joint resolution of the respective associations represented herein.

This code was originally implemented by a joint committee of the Kentucky Bar Association and the Kentucky Medical Association in 1973.

The revised Interprofessional code was approved in 1984 by the KMA House of Delegates and the Board of Governors of the Kentucky Bar Association.

## **APPENDIX A**

### **AGREEMENT TO PAY PHYSICIAN FEES**

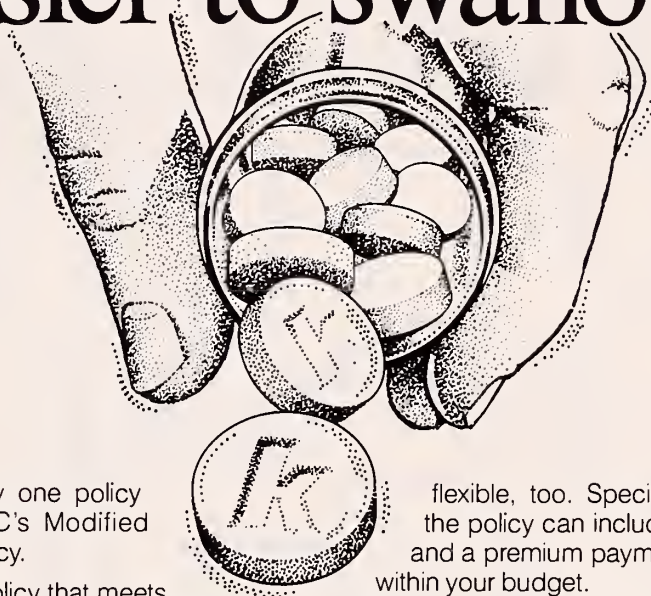
I, \_\_\_\_\_, hereby authorize and direct my attorney, \_\_\_\_\_, to pay promptly to \_\_\_\_\_, M.D., from my portion of the proceeds of any recovery which may be paid to me through my attorney as a result of the injuries sustained by me (and \_\_\_\_\_), on \_\_\_\_\_, 19\_\_\_\_, the unpaid balance of any reasonable charges for professional services rendered by said physician and his associates on my behalf, said professional services to include those for treatment heretofore or hereafter rendered to the time of the settlement or recovery, as well as those for medical reports, consultations, depositions and court appearances on my behalf. I understand that this does not relieve me of my personal responsibility for all such charges in the event there is no recovery or if the recovery is insufficient to satisfy such charges.

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APPROVED AND ACCEPTED:

DATED: \_\_\_\_\_  
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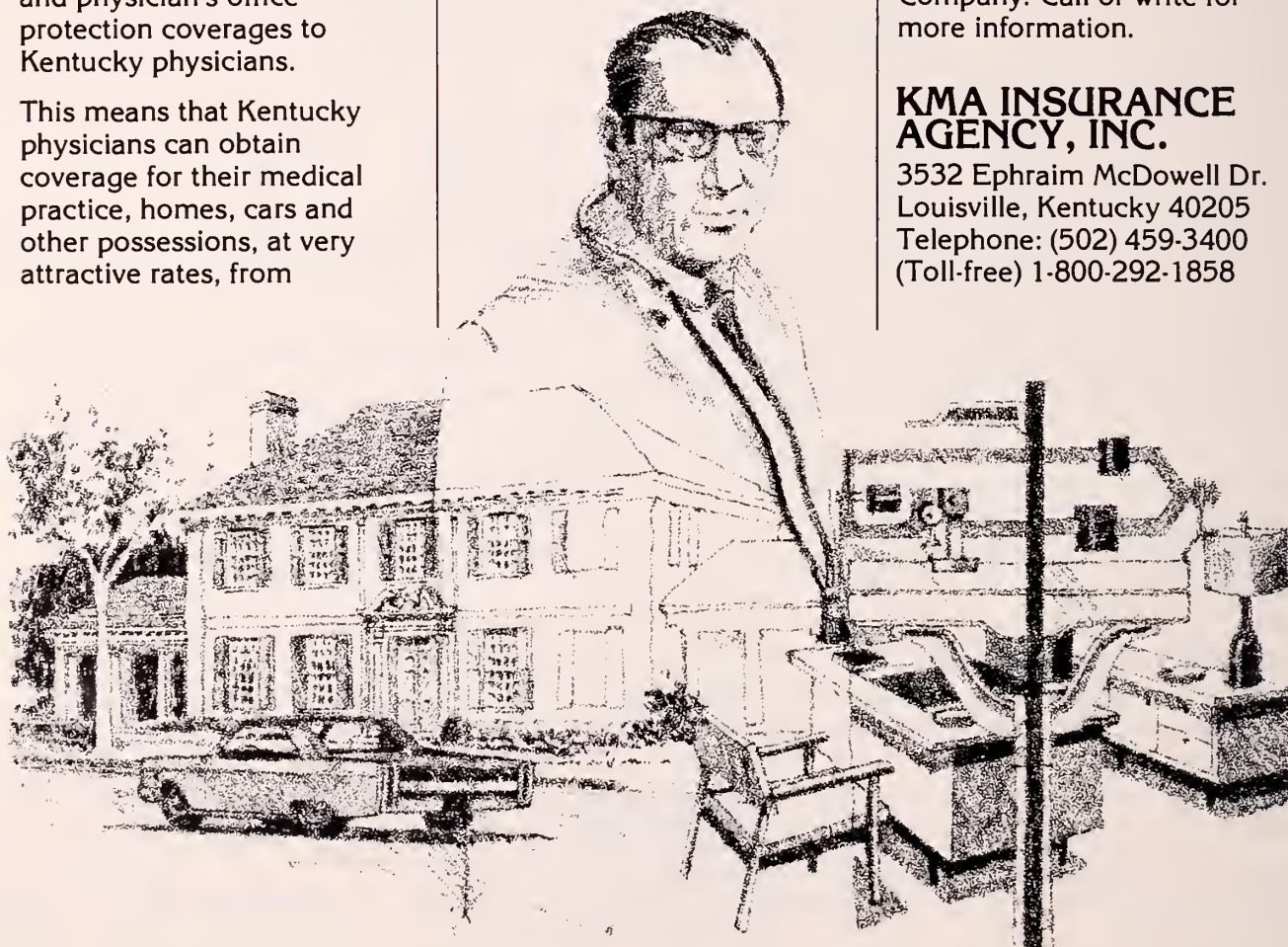
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## IN MEMORIAM

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### **Daniel Nicholas Pickar, M.D.**

**Louisville  
1908–1986**

Daniel Nicholas Pickar, M.D., retired chief of staff of pulmonary medicine at Veterans Administration Medical Center died August 3, 1986. A 1938 graduate of the University of Wisconsin Medical School, Doctor Pickar had been a member of KMA since 1952.

### **James Robert Hendon, M.D.**

**Louisville  
1908–1986**

James Robert Hendon, M.D., a retired specialist in endocrinology and metabolism, died August 4, 1986. Doctor Hendon was a 1934 graduate of the University of Louisville School of Medicine and had been a member of KMA since 1952.

### **Otto Sherman Playforth, M.D.**

**Lancaster  
1909–1986**

Otto Sherman Playforth, M.D., a general practitioner, died August 8, 1986. A 1951 graduate of the University of Louisville School of Medicine, Doctor Playforth was a life member of KMA.

### **Norman Allen Parrott, M.D.**

**Paducah  
1925–1986**

Norman Allen Parrott, M.D., a dermatologist, died August 11, 1986. He was a 1948 graduate of the University of Louisville School of Medicine and had been a member of KMA since 1952.

### **James Sory Forbes, M.D.**

**Hopkinsville  
1918–1986**

James Sory Forbes, M.D., an anesthesiologist, died August 11, 1986. Doctor Forbes was a 1942 graduate of Vanderbilt School of Medicine and was a life member of KMA.

### **Milton M. Green, M.D.**

**Hopkinsville  
1915–1986**

Milton M. Green, M.D., a general practitioner, died September 2, 1986. A 1942 graduate of the College of Physicians & Surgeons, Doctor Green had been a member of KMA since 1956.

### **Martin James Harris, M.D.**

**Louisville  
1907–1986**

Martin James Harris, M.D., a retired pediatrician, died October 4, 1986. A 1935 graduate of the Royal College of Physicians and Surgeons, London, Doctor Harris was a life member of the KMA.

### **Douglas David, M.D.**

**Louisville  
1925–1986**

Douglas David, M.D., an internist and assistant clinical professor of medicine at the University of Louisville School of Medicine, died October 17, 1986. Doctor David was a 1952 graduate of the University of Louisville School of Medicine and had been a member of KMA since 1959.

### **Carl Baker Rankin, M.D.**

**Louisville  
1933–1986**

Carl Baker Rankin, M.D., an internist and assistant clinical professor of medicine at the University of Louisville School of Medicine, died November 8, 1986. A 1959 graduate of the University of Tennessee College of Medicine, Doctor Rankin had been a member of KMA since 1960.

### **Thomas L. Heavern, M.D.**

**Highland Heights  
1933–1986**

Thomas L. Heavern, M.D., a pediatrician with the Northern Kentucky Pediatric Group, PSC, died at his home on November 19, 1986. He was a 1957 graduate of the University of Louisville School of Medicine. Doctor Heavern served as KMA Parliamentarian from 1981 to 1983 and Alternate Delegate from 1972–1976. He had also served on the KMA Rules Committee of the House of Delegates, Constitution and Bylaws Committee and as regional Editor for the *Journal of the Kentucky Medical Association*. Doctor Heavern had served as Vice Speaker of the House until September 1986. He was a recipient of KMA's Distinguished Service Award in 1984 and had been a member since 1951.



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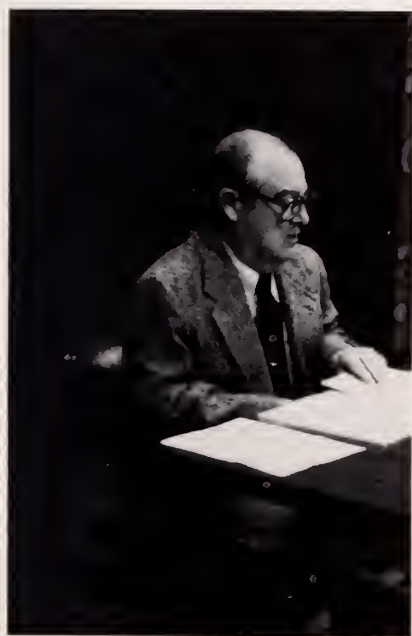
2780 square feet available, \$10.75 per square foot. Located on Third Floor St. Joseph Office Park. Contact: Cardiology Associates of Lexington. Terri Sallee, Telephone (606)276-4429.

## ASSOCIATION

The KMA Committee on Medical Insurance & Prepayment Plans met on Thursday, November 20, 1986, to hear proposals for the group health plan endorsed by KMA and administered by Kentucky Blue Cross/Blue Shield.



C. Douglas LeNeave, M.D., Mayfield (L) and William B. Monnig, M.D., Erlanger, Members of the Committee.



Earl P. Oliver, M.D., Scottsville, Chairman of the Committee on Medical Insurance & Prepayment Plans.

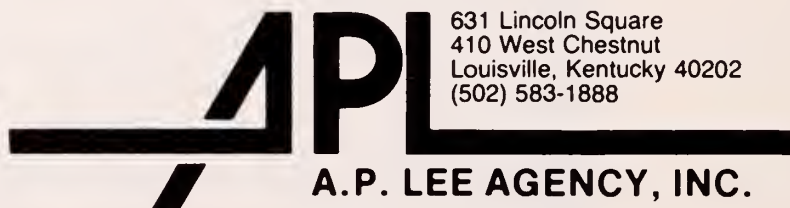
Kareem B. Minhas Memorial Lectureship will be held Friday, March 27, 1986 at 8:00 a.m. in the Second Floor Auditorium, Kosair-Children's Hospital, Louisville, KY. Arthur Garson, Jr., M.D., Professor of Pediatrics and Medicine, Baylor College of Medicine, will speak on "The Normal Child with Irregular Heartbeat." Sponsored by University of Louisville. 1.0 hour of Category I Credit. Information 502-562-8816.

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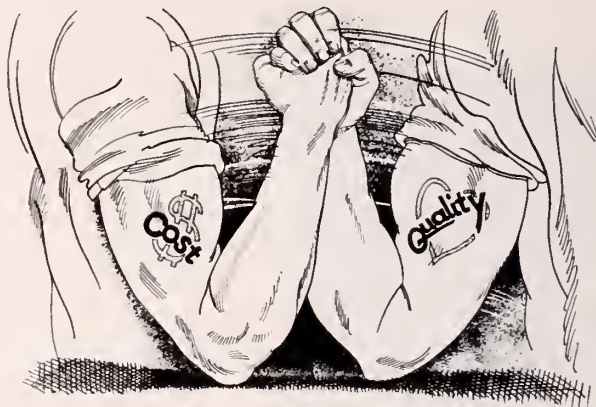
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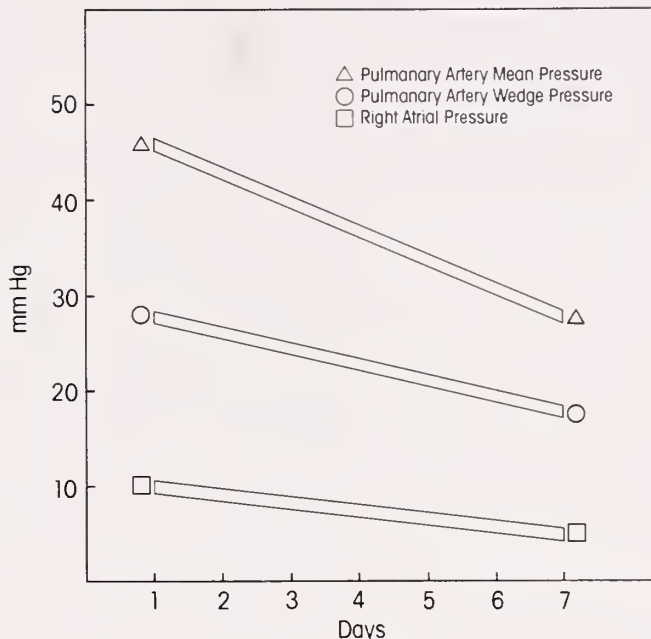
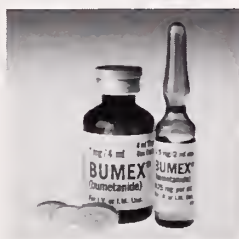
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**References:** 1. Olesen KH, *et al. Pastgrad Med J* 51(Suppl 6) 54-63, 1975. 2. Handler B, Dhingra RC, Rosen KM. *J Clin Pharmacol* 21: 706-711, Nov-Dec 1981. 3. Brater DC, *et al. Clin Pharmacol Ther* 34: 207-213, Aug 1983. 4. Brater DC, Fox WR, Chennovosin P. *J Clin Pharmacol* 21: 599-603, Nov-Dec 1981. 5. Davies DL, *et al. Clin Pharmacol Ther* 15: 141-155, Feb 1974.

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**WARNINGS:** Dose should be adjusted to patient's needs. Excessive doses or too frequent administration can lead to profound water loss, electrolyte depletion, dehydration, reduction in blood volume and circulatory collapse with the possibility of vascular thrombosis and embolism, particularly in elderly patients.

Prevention of hypokalemia requires particular attention in patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis and ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, certain diarrheal states, or other states where hypokalemia is thought to represent particular added risks to the patients.

In patients with hepatic cirrhosis and ascites, sudden alterations of electrolyte balance may precipitate hepatic encephalopathy and coma. Treatment in such patients is best initiated in the hospital with small doses and careful monitoring of the patient's clinical status and electrolyte balance. Supplemental potassium and/or spironolactone may prevent hypokalemia and metabolic alkalosis in these patients.

In cats, dogs and guinea pigs, Bumex has been shown to produce ototoxicity. Since Bumex is about 40 to 60 times as potent as furosemide, it is anticipated that blood levels necessary to produce ototoxicity may rarely be achieved. The potential for ototoxicity increases with intravenous therapy, especially at high doses.

Patients allergic to sulfonamides may show hypersensitivity to Bumex.

**PRECAUTIONS:** Measure serum potassium periodically and add potassium supplements or potassium-sparing diuretics, if necessary. Periodic determinations of other electrolytes are advised in patients treated with high doses or for prolonged periods, particularly in those on low salt diets. Hyperuricemia may occur. Reversible elevations of the BUN and creatinine may occur, especially with dehydration and in patients with renal insufficiency. Bumex may increase urinary calcium excretion.

Possibility of effect on glucose metabolism exists. Periodic determinations of blood sugar should be done, particularly in patients with diabetes or suspected latent diabetes.

Patients should be observed regularly for possible occurrence of blood dyscrasias, liver damage or idiosyncratic reactions.

Especially in presence of impaired renal function, use of parenterally administered Bumex should be avoided in patients to whom aminoglycoside antibiotics are also being given, except in life-threatening conditions.

Drugs with nephrotoxic potential and bumetanide should not be administered simultaneously. Since lithium reduces renal clearance and adds a high risk of lithium toxicity, it should not be given with diuretics.

Probenecid should not be administered concurrently with Bumex.

Concurrent therapy with indomethacin not recommended.

Bumex may potentiate the effects of antihypertensive drugs, necessitating reduction in dosage.

Interaction studies in humans have shown no effect on digoxin blood levels.

Interaction studies in humans have shown Bumex to have no effect on warfarin metabolism or on plasma prothrombin activity.

**Pregnancy:** Bumex should be given to a pregnant woman only if the potential benefit justifies the potential risk to the fetus.

Bumetanide may be excreted in breast milk.

**Pediatric Use:** Safety and effectiveness below age 18 not established.

**ADVERSE REACTIONS:** Muscle cramps, dizziness, hypotension, headache and nausea, and encephalopathy (in patients with preexisting liver disease).

Less frequent clinical adverse reactions are weakness, impaired hearing, rash, pruritus, hives, electrocardiogram changes, abdominal pain, arthritic pain, musculoskeletal pain and vomiting. Other clinical adverse reactions are vertigo, chest pain, ear discomfort, fatigue, dehydration, sweating, hyperventilation, dry mouth, upset stomach, renal failure, asterixis, itching, nipple tenderness, diarrhea, premature ejaculation and difficulty maintaining an erection.

Laboratory abnormalities reported are hyperuricemia, azotemia, hyperglycemia, increased serum creatinine, hypochloremia, hypokalemia, hyponatremia, and variations in CO<sub>2</sub> content, bicarbonate, phosphorus and calcium. Although manifestations of the pharmacologic action of Bumex, these conditions may become more pronounced by intensive therapy.

Diuresis induced by Bumex may also rarely be accompanied by changes in LDH, total serum bilirubin, serum proteins, SGOT, SGPT, alkaline phosphatase, cholesterol, creatinine clearance, deviations in hemoglobin, prothrombin time, hematocrit, platelet counts and differential counts. Increases in urinary glucose and urinary protein have also been seen.

#### **DOSAGE AND ADMINISTRATION:**

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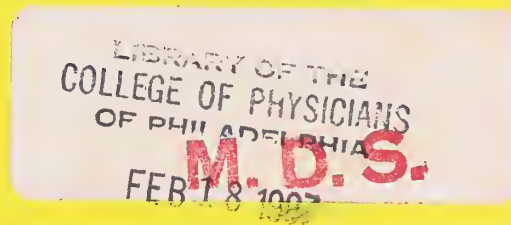


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### FEBRUARY BUYERS' GUIDE FOR JOURNAL OF KMA

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# Be Careful What You Sign!

**A**s I look at Kentucky medicine, the most distressing thing I see and feel is a widespread attitude that the practice of medicine is slipping away from the physician. Even more distressing is the feeling that nothing can be done about it.

Most of this appears to be related to the many new forces that are being applied to medicine. Interference by third party payors, HMO's, hospitals, and government has left many of us irritated, frustrated, and with a rather hopeless and despondent attitude.

There is no question that serious inroads have been made, but I do not believe we are ready to turn medicine over to others yet. Medicine is now a complex system and will continue to be so. Good doctors are practicing good medicine in solo practice, small groups, large groups, clinics, HMO's, hospitals of all types, and in academic medicine. A multi-faceted system is here to stay. Control of medicine does not need to pass out of the hands of physicians. However, there are several things we need to watch closely.

**Be careful what you sign!** Many

doctors appear to be willing to sign anything if they think it will prevent losing a few patients. Be very sure who controls any organization you join and what the implications are for quality of care. It would be better to lose a few patients than to lose control of when, where, and why you practice medicine.

The Kentucky Medical Association and the local societies are keenly aware of the many difficult decisions physicians are having to make. KMA is developing new programs to help you in these decisions. Complex legal, ethical and financial questions arise and we need to have the best counsel available.

KMA leadership understands that in a fluid and unstable situation such as now exists in medicine, it is important that accurate information and competent advice be readily available. Our Trends Committee has just developed a list of the HMO's in Kentucky—who controls them, their size, basic organization, location, officers and directors, recent profit and loss, *etc.* This will be available soon.

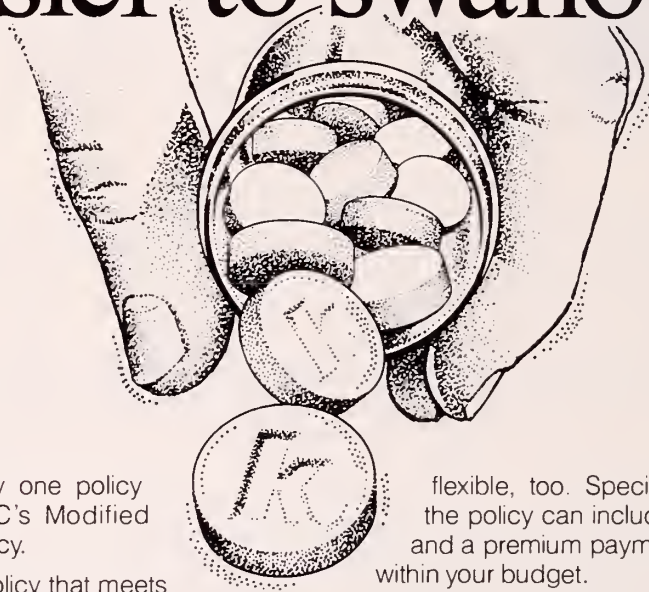
KMA is also working on a program to provide members access to legal ad-

vice on medical contracts and agreements prior to signing. Most physicians and many attorneys are unfamiliar with the complex health plan agreements and their potential effects on a medical practice or on patient care.

No matter what the system, Kentucky patients will continue to be treated by Kentucky doctors. The newer alternative delivery systems are here to stay, but I see no sign that they will take over medicine unless it is by default. Regardless of the system under which you elect to practice, be sure the first priority is good patient care. The right of the doctor to practice medicine by high medical and ethical standards, not economic quotas or administrative guidelines, is paramount. If we, the doctors of Kentucky, follow these principles we will maintain control of our profession. If we are willing to sign anything or join anything because we are afraid we might lose some patients, we are doomed.

**Richard F. Hench, M.D.**  
**KMA President**

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**INDERAL<sup>®</sup> LA**  
(PROPRANOLOL HCl)

after a major nationwide trial...





An aerial photograph of a large, modern stadium at dusk. The stadium is filled with spectators, and the field is brightly lit. The surrounding area includes parking lots, roads, and distant hills under a twilight sky. The text is overlaid on the upper part of the stadium.

...we had  
to find  
just the  
right room.



# 60,073 patients (90%) who started on INDERAL<sup>®</sup> LA stayed on INDERAL LA.<sup>1\*</sup>

---

## Surprising? Not really.

Because most patients on INDERAL LA (propranolol HCl) don't even know it's working.

A recent double-blind, placebo-controlled, crossover study in 138 hypertensive patients<sup>2</sup> revealed that INDERAL LA has a side effects profile unsurpassed by atenolol or metoprolol — which shows how well-tolerated once-daily INDERAL LA can be.

## Sole therapy or concomitant therapy?

**Fifty-nine percent of the time, INDERAL LA stood on its own.**

The patients in the nationwide compliance trial were no different from yours. Generally when the antihypertensive regimen is complicated, compliance may become a problem. So, the effectiveness of INDERAL LA as once-daily monotherapy is a big plus. Of the remaining hypertensives in the program, 36% were controlled merely with the addition of a diuretic to INDERAL LA.

## For the noncompliant patients in your practice, INDERAL LA may well be the answer.

Almost 20,000 of the patients in the nationwide compliance trial were identified as having been noncompliant with their previous antihypertensive therapy. Their physicians reported that 88% showed improved compliance when placed on once-daily INDERAL LA.

---

## Control, comfort, and compliance

ONCE-DAILY  
**INDERAL<sup>®</sup> LA**  
(PROPRANOLOL HCl) LONG ACTING  
CAPSULES

Like conventional INDERAL Tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma.

\*After a 30-day trial with INDERAL LA, physicians reported that 90% of the patients would remain on INDERAL LA.

## The one you know best keeps looking better

Please see next page for brief summary of prescribing information

# The one you know best keeps looking better

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR)

## INDERAL® LA brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

Inderal LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

Inderal LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal, as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of Inderal has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. Inderal has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, Inderal also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

**INDICATIONS AND USAGE.** **Hypertension:** Inderal LA is indicated in the management of hypertension, it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS.** **CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)** PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior

to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Inderal (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOGLYCEMIA.** Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case, this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS.** **General.** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenergic receptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**Clinical Laboratory Tests.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncope attacks, or orthostatic hypotension.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**Pregnancy.** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

**Pediatric Use.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the

Raynaud type.

**Central Nervous System:** lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

**Gastrointestinal:** nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** pharyngitis and agranulocytosis.

erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** bronchospasm.

**Hematologic:** agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-Immune:** in extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** alopecia, LE-like reactions, psoriasis-like rashes, dry eyes, male impotence and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (propranolol) have not been associated with propranolol.

**DOSEAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal tablets to Inderal LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg for mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION—Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS—Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE—Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS—** 80-160 mg Inderal LA once daily.

**PEDIATRIC DOSAGE—** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. Inderal LA National Compliance Evaluation Program. Data on file, Ayerst Laboratories.
2. Ravid M, Lang R, Jutrin I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985; 145: 1321-1323.

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# Diagnosis and Treatment of Intra-Abdominal Fluid Collections

## Concepts and Tactics

C. Dale Brown, M.D., William E. Adams, M.D.  
William G. Wheeler, M.D., Michael J. Jones, M.D.

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*Since 1879, when Volkmann successfully performed the first operative drainage procedure by partially resecting the seventh rib and draining an abscess, localized fluid collections have been removed by rather radical methods. In the early 1980's, Gerzof, Haaga, and Weinstein presented evidence, contrary to accepted surgical teachings, indicating that 90% of all abdominal fluid collections, whether infected or sterile, could successfully be drained by percutaneous insertion of a small drainage tube. Morbidity and mortality immediately decline. Our experience with 43 drainage cases will be discussed in detail and an unusual, yet very successful, approach to draining pelvic abscesses described.*

---

Guided percutaneous interventional radiology has become well established in many contemporary radiology departments. Just a few years ago interventional radiology was of little interest to the clinician, however, increasing pressure from the cost conscious public and third party payors has compelled hospitals and physicians to seek less expensive methods of medical care.

Interventional radiology procedures exist because of their effectiveness in accomplishing diagnostic and therapeutic goals while substantially reducing patient risks and costs. Surgical laparotomy for biopsy or fluid drainage is a striking example. In the era before the CT scanner, ultrasound, and magnetic resonance, exploratory laparotomy was the only diagnostic and therapeutic modality available to resolve unknown abdominal disease. Present day imaging equipment can quickly locate abdominal masses, and is extremely sensitive in determining possibilities. Guided percutaneous biopsy

and drainage are safe in experienced interventional hands and are at least 10 times less costly than surgical procedures rendering the same results. Over 90% of all fluid collections can successfully be managed and diagnosed by the percutaneous route.<sup>2,3,4,5,6</sup> Clearly, if these procedures were uniformly available, interventional radiology would save hundreds of millions of dollars in health care costs over conventional methods of diagnosis and treatment.

A radiology department that offers interventional percutaneous diagnosis and treatment methods adds vitality and lustre to the entire hospital, while providing the clinicians with less expensive and safer methods of attaining therapeutic goals.

### Fluid Collections: Diagnosis and Drainage

By far, the most useful techniques employed to diagnose fluid collections are ultrasound and computed tomography. By definition abscesses contain fluid and detritus and are distinguishable on ultrasound as fluid collections, and by CT as low attenuation masses. Fortunately, most abscesses are unilocular and can be drained by the insertion of a tube into the single cavity.<sup>7</sup> Once bowel loops are opacified with gastrointestinal contrast medium, either by oral or enema insertion, CT can accurately locate abdominal masses in over 90% of the patients.<sup>8,9</sup> The axial anatomy rendered by the CT scanner details several distinguishable characteristics of an abscess:

- The abscess is a localized mass with defined borders.
- Adjacent tissue planes are indistinct and altered by edema.
- A donut or orange peel edge enhancement is frequently seen after the infusion of intravenous contrast medium.

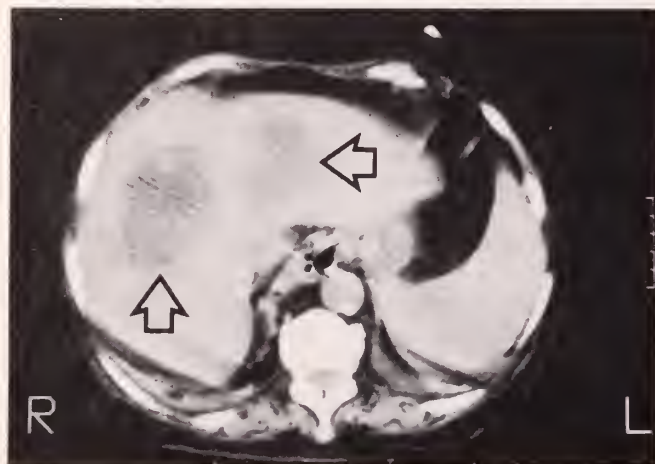


Fig. 1 a & b: It would have been helpful if these “kissing” hepatic abscesses had communicated, but alas, they did not. Drained on sequential days after a CT Scan revealed only one emptied. Premedicated for bacteremia she still had a stormy four hours post-drainage.

- The center of the mass has a low attenuation number, usually below 25.<sup>10,11</sup>

Ultrasound may be abscess specific if the following signs are observed and correlated with clinical findings.

- A fluid filled mass of varying homogeneity and sound transmission.
- Layering debris which changes with patient position and dependence.
- High intensity echoes within the mass, secondary to air production by air forming organisms or communication with the intestine.

Ultrasound is very effective in locating abscesses and fluid collections, however, several special problems arise in postoperative patients and must be overcome in order to appropriately evaluate these sick patients. Most of our patients have an array of bandages, stay sutures, ostomies, open wounds, and a variety of attached entering and exiting hardware. The transducer must make contact with the skin and many areas on the abdominal surface are not accessible. Lower thoracic ribs interfere with and deflect the sound beam and vital structures just below the ribs and frequently beneath the diaphragms are hidden. We have learned through experience that most post-operative patients with abdominal infections arrive in ultrasound with an extraordinary amount of bowel gas. This, of course, adds difficulty to the ultrasound examination and limits visibility.

Repeat studies are in order if the abscess is clinically present but cannot be located. Although bones are permanent impediments to the ultrasound beam, bowel gas varies daily and a delay of six to 12 hours may be very rewarding in finding an abscess and a “window” to the

abscess. Reported accuracy also varies, but 90% of abscesses can usually be located if patience prevails.<sup>8,9,12</sup>

The differential diagnosis of other abdominal fluid collections include: Biloma, Lymphocele, Urinoma, Seroma, and Hematoma (BLUSH). The clinical elements of infection and sepsis are usually absent, however, fever is not uncommon with hematomas. Although not advocated, we have drained, by vigorous lavage, two patients with biologically sterile postoperative hematomas whose daily temperature ranged above 103. Both quickly reverted to normal after drainage. The use of postoperative anticoagulation is superseded only by the use of postoperative antibiotics in our institutions, and we are frequently called upon to evaluate new abdominal masses. Ultrasonically, hematomas contain highly echogenic blood products and clots. In contrast, lymphoceles, bilomas, and urinomas are truly echo-free with exceedingly well defined, sharp borders. Ascites is also echo-less, but shifts and flows more freely and is bordered by adjacent bowel loops and organ surfaces.

### Drainage Criteria

The ultimate goal of any drainage procedure is the permanent resolution of the abscess or fluid collection. In critically ill patients, percutaneous drainage may only be temporizing until appropriate antibiotics and nutrients can be administered. Occasionally additional surgery is necessary and a temporary solution affords the surgeon sufficient time to improve his success rate. A patient is never too ill to undergo a drainage procedure in the radiology department. We re-emphasize never



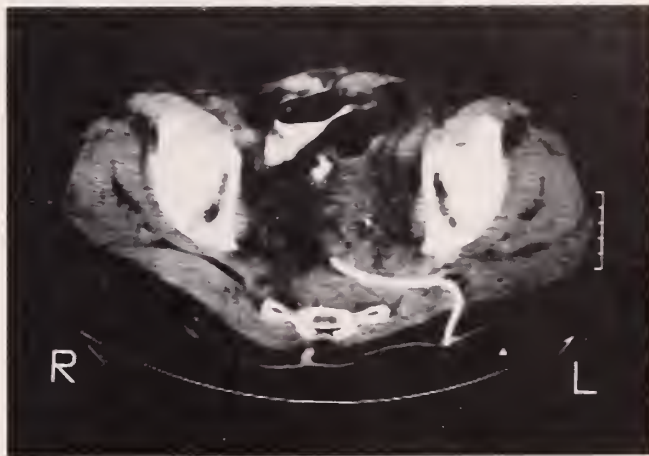
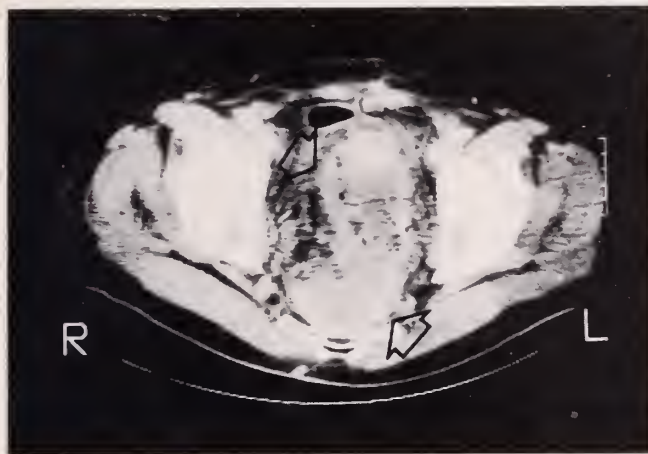


Fig. 2 a & b: Pelvic abscesses present special problems: anterior bowel gas. We have used the transgluteal-sciatic notch approach seven times for drainage and find it far superior to an anterior pelvic puncture. Use a soft catheter and proceed slowly to avoid the sciatic nerve.

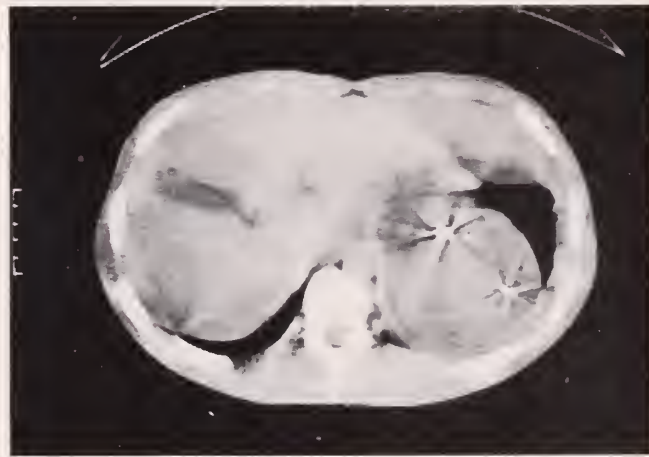
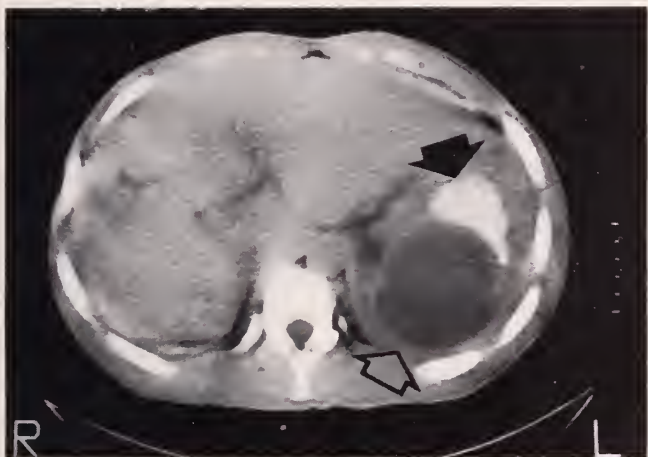


Fig. 3 a & b: Post-trauma splenectomy abscess. Left upper quadrant abscesses from all causes are difficult to control. Ours drain copious amounts and reluctantly shrink. Be patient.

too ill. Shields indicated, in a well written article, that organ failure can only be reversed with definitive correction of the underlying infection.<sup>27</sup> There are several prerequisites that must be met before an attempt drainage procedure begins:

- Foremost, a safe “window” to the lesion.
- Complete concurrence from the attending surgeon with immediate surgical backup in case of failure.
- Well delineated fluid collection or collections.
- Small bore needle aspiration of fluid for confirmation.
- Complex abscess features are not a deterrent.<sup>13</sup>

In our experience, contraindications have been variable. Unsafe access to the abscess or fluid constitutes the most serious contraindication, however, we have successfully drained abscesses through unsafe “win-

dows” in extremely ill patients when surgery was not an option. Drainage through organs and viscera can usually be avoided although we have drained a localized medial right sub-diaphragmatic abscess through the right hepatic lobe, and two large postoperative pelvic abscesses transgluteal through several loops of small bowel caught on the edge of the abscesses. All were successful. When bowel is penetrated and can be recognized either by the drainage material or an abscessogram performed during the evaluation of the abscess cavity, withdrawal of the drainage tubes must be very gradual. This allows bowel loops to seal. We usually withdraw three centimeters daily for three to four days, and as yet have had no abscess recurrence or fistula formation. Two patients drained by the transgluteal routes experienced sciatic nerve irritation and leg pain.



PATIENT DATA IN PERCUTANEOUS DRAINAGE								
Location	# Cases	Route Planned		Complications	Drainage Inadequate	Multiple Catheters	Septic Death	Non-Septic Death
		CT	U/S					
Post Op Abscesses								
Pelvic	8	8		Bowel puncture 2		1		
Subphrenic								
right	7	4	3		1	2		
left	3	2	1	small pneumothorax 1				
Subhepatic	2	2						1
Mid Abdominal	2	1	1					
Retroperitoneal	2	2				1		
Appendiceal	2	2						
Spontaneous Abscesses								
Hepatic	3	2	1	sepsis 2		1		
Renal	2	2						
Seroma	3	2	1					
Biloma	2	2						
Gallbladder	1		1					
Pancreatic Pseudocyst	2	2			1			
Urinoma	2	2						
Hematomas	2							
TOTALS	43	35	8	5	2	5	0	1

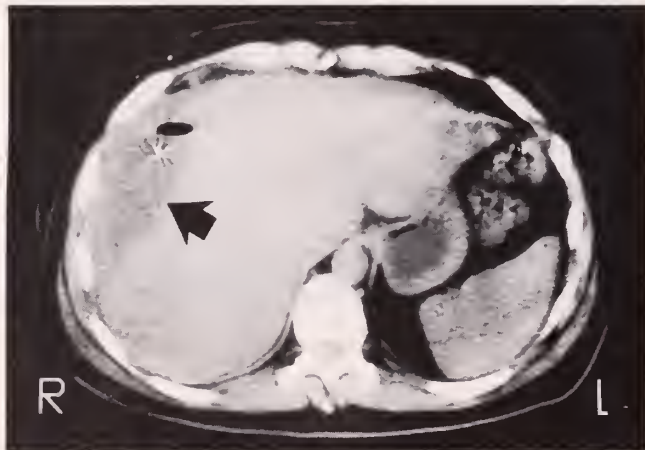


Fig. 4: Right subdiaphragmatic abscess with drain in place just below the gas bubble. The pus was very thick, therefore, we inserted the largest percutaneous sump we could find. The tube was removed in four days.

Switching to a very soft pliable catheter immediately relieved the discomfort.

Relative contraindications to percutaneous drainage include a bleeding diathesis and multilocular abscesses. Administered blood products, and the prudent use of multiple catheters and guidewires in experienced interventional hands can usually solve these problems. Surgical intervention is necessary if the abscess continues to smolder or if the cavity fails to decrease in size. Every two or three days a 50% solution of contrast

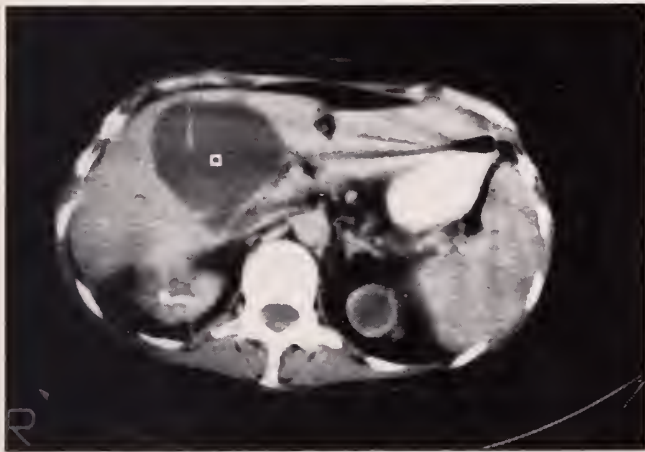
medium is injected slowly into the cavity and x-rays are obtained to evaluate the size. The abscessogram usually diminishes rapidly in size, and in one to 44 days (mean in our series, 12 days) the drainage tubes can be removed. Our shortest catheter stay was one day, and our longest, six weeks. In several operative series the mean length of drainage is about 29 days.<sup>6</sup>

Repeat CT and ultrasound evaluations also aid in the decision to withdraw the catheter. We use the following criteria to help in determining when the catheter may be removed:

- Absent or extremely small abscess cavity.
- Diminished size or absence of the abscess by CT or ultrasound.
- 24 hours of clear drainage.
- Improved physical and clinical parameters such as vital signs, white blood count, etc.

Success rates in draining abscesses range around 90% in large series.<sup>2,3,5,6,14,15,16</sup> The cure rates continue to climb as better equipment, softer catheters, and improved techniques become available. Generally, failures have occurred predominantly in patients with multilocular abscesses, phlegmons, and abscesses that communicate by organized fistula with the intestinal tract.<sup>3,16,19,20</sup> Even in these patients the temporizing effect of a drainage tube and subsequent timely surgery saves patients.<sup>17,18</sup>

Of course, open surgical drainage is imperative when



**Fig. 5 a & b:** Terminally ill cancer patient with severe pain from cholecystitis and gallbladder hydrops. Percutaneously drained with excellent pain relief until death four weeks later.



a patient does not promptly respond to a percutaneous drainage procedure or when the abscess is totally inaccessible to the percutaneous approach.

We subscribe to a very aggressive policy of work-up in postoperative fevers. If cellulitis or early phlegmon can be detected by ultrasound or CT, needle aspiration samples, often courageously obtained, usually give sufficient bacteriological information to institute early and appropriate antibiotic therapy and ward off an anaerobic or aerobic abscess. The indium-111-tagged leukocyte scan and the gallium scan have an unacceptable false-positive rate in our institutions and are only used in desperation when other methods fail to locate the abscess.<sup>21,22</sup>

The choice of drainage catheters from sump to trocar varieties is wide and varied, and all must be in inventory and immediately available. Most are inserted or advanced over a guidewire or stiffening cannula and placed judiciously within the cavity. The cavity is evacuated and gently irrigated with saline. The radiologist must be astutely aware of the amount in and out during the irrigation of the abscess. An overly filled abscess cavity will rupture spilling infected debris far and wide. Standard x-rays locate the drainage tube for future reference and we frequently document position and abscess size on a post drainage CT scan. The catheter is taped, glued, strapped, or sewn to the skin and connected to a biliary drainage bag. Gravity is quite sufficient as pus does not clot and frequent irrigation is usually not required. Detritus may intermittently plug holes, therefore, every four days the radiologist irrigates the catheter with a small volume, 10 cc or less, of saline. Also, it is imperative to turn the patient fre-

quently in order to facilitate dependant drainage. Sitting bedside, if at all possible, speeds drainage and cavity closure. The twenty-four hour exit volume is recorded along with frequent temperatures and daily WBC counts. Good nutrition is as imperative as antibiotics and must be instituted early.

### Conclusion

Mortality rates range up to 31% (mean operative mortality, 20%) in patients undergoing operative abscess drainage.<sup>6,23,24,25,26</sup> Unlocated abscesses or hidden locules are usually responsible for the high mortality rates recorded in most operative series.<sup>6</sup> Similar abscesses resolve faster and with a lower recurrence rate after percutaneous drainage.<sup>10</sup> Early CT and ultrasound diagnosis, or possibly the absence of anesthesia and the insult of major surgery contributes to more rapid improvement in patient status undergoing percutaneous procedures. Hospital stays are shorter by about one week over operative drainage procedures in our institutions, and patient acceptance of interventional drainage procedures remains excellent. Above all, supportive communication between surgeon and radiologist is imperative.

**References** 1. Hall D, Gruentzig A: Percutaneous transluminal coronary angioplasty: current procedure and future direction.



## INTRA-ABDOMINAL FLUID COLLECTIONS—Brown et al

AJR 142:13–16, 1984. 2. Haaga JR, Weinstein AJ: CT-guided percutaneous aspiration and drainage of abscesses: *AJR* 135:1187–94, 1980. 3. van Sonnenberg E, Ferrucci JT, Mueller PR, Wittenberg J, Simeone JF, Malt RA: Percutaneous radiographically guided catheter drainage of abdominal abscesses: *JAMA* 247:190–2, 1982. 4. Gerzof SG, Robbins AH, Johnson WC, Birkett DH, Nabseth DC: Percutaneous catheter drainage of abdominal abscesses, a five year experience: *N Engl J Med* 305:653–7, 1981. 5. van Sonnenberg E, Ferrucci JT, Mueller R, Wittenberg J, Simeone JF: Percutaneous drainage of abscesses and fluid collection: technique results, and applications: *Radiology* 142:1–10, 1982. 6. Johnson WC, Gerzof SG, Robbins AH, Nabseth DC: Treatment of abdominal abscesses: comparative evaluation of operative drainage versus percutaneous catheter drainage guided by computed tomography or ultrasound: *Ann Surg* 194:510–20, 1981. 7. Gerzof SG, Spira R, Robbins AH: Percutaneous abscess drainage: *Sem in Roent* 16:62–71, 1981. 8. Halber MD, Daffner RH, Morgan CL, et al: Intra-abdominal abscess: current concepts in radiologic evaluation: *Am J Roentgenol*, 133:9–13, 1979. 9. Knochel JQ, Koehler PR, Lee TG, et al: Diagnosis of abdominal abscesses with computer tomography, ultrasound and 111-indium leukocyte scans: *Radiology* 137:425–32, 1980. 10. Gerzof SG, Robbins AH, Birkett DH: Computed tomography in the diagnosis and management of abdominal abscesses: *Gastrointestinal Radiol*, 3:387–94, 1978. 11. Haaga JR, Alfidi RJ, Havrilla TR, et al: CT detection and aspiration of abdominal abscesses: *Am J Roentgenol* 128:465–74, 1977. 12. Maklad NF, Doust BD, Baum JK: Ultrasound diagnosis of postoperative intra-abdominal abscess: *Radiology* 113:417–22, 1974. 13. Gerzof SG, Johnson WC, Robbins AH, Nabseth DC: Expanded criteria for percutaneous abscess drainage: *Arch Surg* 120:227–32, 1985. 14. Karlson KB, Martin EC, Fankuchen EI, Schultz RW, Casarella WJ: Percutaneous abscess drainage. *Surg Gynecol Obstet* 154:44–

8, 1982. 15. Gerzof SG, Robbins AH, Johnson WC, Birkett DH, Nabseth DC: Percutaneous catheter drainage of abdominal abscesses: *N Engl J Med* 305:653–7, 1981. 16. Martin EC, Karlson KB, Fankuchen E, Cooperman A, Casarella WJ: Percutaneous drainage in the management of hepatic abscess: *Surg Clin North Am* 61:157–67, 1981. 17. van Sonnenberg E, Wing VW, Casola G, et al: Temporizing effect of percutaneous drainage of complicated abscesses in critically ill patients: *AJR* 142:821–26, 1984. 18. Joseph WL, Kahn AM, Longmire WP Jr: Pyogenic liver abscess: *Am J Surg* 135:63–8, 1968. 19. Martin EC, Karlson KB, Fankuchen EI, Cooperman A, Casarella WJ: Percutaneous drainage of postoperative intra-abdominal abscesses: *AJR* 138:13–5, 1982. 20. Jaques P, Mauro M, Safrit H, Yankaskas B, Piggott B: CT features of intra-abdominal abscesses: prediction of successful percutaneous drainage: *AJR* 146:1041–45, 1986. 21. Halasz NA, van Sonnenberg E: Drainage of intra-abdominal abscesses: *Am J Surg* 143:112–4, 1983. 22. Leopold GR: Invited commentary. *World J Surg* 4:401–2, 1980. 23. Carter R, Brewer LA: Subphrenic abscess: a thoracoabdominal clinical complex: *Am J Surg* 1108:165–74, 1964. 24. Doberneck RC, Mittelman J: Reappraisal of the problems of intra-abdominal abscess: *Surg Gynecol Obstet* 154:875–9, 1982. 25. Fry DE, Garrison RN, Polk HC Jr, et al: Determinants of death in patients with intra-abdominal abscess: *Surg* 88:517–23, 1980. 26. Altemeir WA, Culbertson WR, Fullen WD, Shock CD: Intra-abdominal abscesses: *Am J Surg* 125:70–9, 1973. 27. Polk HC, Shields CL: Remote organ failure, a valid sign of occult intra-abdominal infection: *Surg* 81:310–13, 1977.

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# Evaluation of a Cytologic Cervical Cancer Screening Program

Heidi H. Saikaly, Ph.D., Dan Martin, M.D. and Linda Traylor, R.N.

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*The cervical cancer screening program of the Hopkins County Health Center (HCHC), Kentucky was evaluated to determine its cost and effectiveness in preventing cancer. Medical charts of all cervical intraepithelial neoplasia (CIN) cases were reviewed at the private clinic where diagnostic confirmation and treatment were performed. In 1984, 828 HCHC patients were screened resulting in 70 cytological findings of CIN, of which 49 were diagnostically confirmed and treated. It is estimated that 16 to 30 cases of invasive cervical cancer were prevented at a cost of between \$1,080 and \$2,025 per case. The majority of the screened patients (86.6%) were under 30 years of age. The preventive potential of the pap smear program may be improved by directing effort to screening women who are beyond their childbearing years.*

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Cervical cancer remains an important cause of morbidity and mortality among American women. In 1986, 14,000 women will be diagnosed and 6,800 will die of the disease in the United States.<sup>1</sup> The Papanicolaou test has been effective as a means of detecting the asymptomatic precursors of invasive cervical cancer, dysplasia and carcinoma-in-situ (CIS). Consequently, there has been a shift to diagnosis of patients with earlier stage disease which is more amenable to treatment and carries a more favorable prognosis. Between 1945-75, there has been a 50% decline in the incidence of invasive cervical cancer and mortality has dropped from 15 to six per 100,000.<sup>2</sup> In Kentucky, cervical cancer is the sixth leading cause of cancer deaths in women with a mortality rate of approximately six per 100,000 which has been relatively stable since 1977.<sup>3</sup> One hundred thirteen women died of the disease in Kentucky in 1983.<sup>4</sup>

Routine cervical cancer testing is carried out at most health department centers in Kentucky as it is at the

Hopkins County, Kentucky Health Center of the East Pennyriple District Health Department, and it was decided that an evaluation of one county's screening with respect to cervical cancer detection and prevention as well as the associated cost might prove useful.

## Results of Papanicolaou Screening

In 1984 the Hopkins County Health Center (HCHC) screened 828 women for cervical cancer. They were initially seen in the family planning, prenatal, and general medical clinics.

The majority (86.6%) of these screenees were less than 30 years of age. Because of the necessity occasionally to repeat tests, 887 Papanicolaou (pap) smears were collected from these individuals.

As shown in Table 1, 70 (8.5%) of the 828 screenees were found initially to have either dysplasia or CIS by pap smear screening and were referred to private physicians for further diagnostic work and therapy. There was histological confirmation of 44 cases of dysplasia and five cases of CIS. Among the 21 cases which were not histologically confirmed: repeated pap smears were normal (10); colposcopic biopsies (four) or colposcopy alone (one) showed no evidence of dysplasia or CIS; and follow up had not been completed due to patient noncompliance (four), pregnancy (one), or relocation to another state (one).

## Natural History of Cervical Cancer Precursors

It is generally accepted that dysplasia and CIS of the cervix are precursors of invasive cervical cancer (ICC). While all CIS lesions do not progress to ICC, it is thought that most cases of ICC have gone through a CIS stage.<sup>5</sup> However, it is not known how many years these preinvasive stages persist before progression occurs, nor is it known what proportion of such lesions would regress spontaneously. Figure 1 shows that dysplasia may progress, remain stable, or regress to normal and demonstrates the estimation that if left untreated, 80% of all dysplasias would progress to CIS in 10 years.<sup>6</sup>

TABLE 1  
PAP SMEAR AND HISTOLOGICAL RESULTS  
FOR 828 HCHC PATIENTS

<i>Pap Smear Result</i>	
Negative	446
Minor Abnormality	312
Positive (Dysplasia/CIS)	70
<i>Histological Confirmation</i>	
Dysplasia	44
CIS	5
Not Confirmed	21

CIS has been reported to progress to ICC in anywhere from 40-75% of cases.<sup>7,8</sup>

Since progression or regression of premalignant lesions cannot be predicted in an individual case, it becomes necessary to treat all women who develop dysplasia or CIS in order to prevent the possibility of ICC. By using the available estimated rates of progression, even though there is wide variation in the estimates, it is possible to arrive at the number of ICC cases which have been prevented by a screening program. Based on the rates of progression shown in Figure 1, it is estimated that by detecting 44 cases of dysplasia, the screening program prevented 35 expected cases of CIS and from 14-26 expected cases of invasive cervical cancer.

By detecting the five cases of CIS, the screening program prevented two to four expected cases of ICC. Therefore it is estimated that 16-30 ICC cases were prevented.

### Cost of Screening Program

The screenees were patients in the family planning, prenatal and general medical clinics of the HCHC. The cost of each pap test is \$3 in the family planning and prenatal programs; the \$27 for general medical clinic patients includes the pap and other testing. The total cost of cytological screening was \$4,431 which includes 811 tests in the family planning and prenatal programs and 74 general medical clinic patients. The cost to the health department for preventing each case of ICC was between \$148 (\$4,431/30) and \$277 (\$4,431/16). The cost absorbed by the private clinic where the pap smears are sent for screening was \$6,209 (\$7 per test).

The 70 patients with dysplasia and CIS pap smear results were referred to private physicians for further diagnostic and therapeutic care. The cost for diagnostic follow-up was \$10,346. The cost of treating the 49

TABLE 2  
COSTS OF CERVICAL CANCER SCREENING

Activity	Cost
Cytology, Health Center	
Costs	\$ 4,431
Cytology, Private Clinic	
Costs	\$ 6,209
Associated Diagnostic Costs	\$10,346
Treatment Costs	\$11,409
Total	\$32,395
Estimated Cases of ICC Prevented	16 - 30
Cost per Prevented Case	\$2,025 $\frac{(\$32,395)}{(16)}$ to \$1,080 $\frac{(\$32,395)}{(30)}$

patients with histologically confirmed lesions was \$11,409. As shown in Table 2, the total cost of preventing each case of ICC was between \$1,080 - \$2,025.

### Discussion

Cytological screening of 828 women led to the detection and treatment of 49 histologically confirmed cases of dysplasia and CIS. An estimated 16 to 30 cases of ICC were prevented. The cost to the HCHC for pap smear testing was from \$148 to \$277 per prevented invasive cervical cancer case. The total cost for detection, diagnostic confirmation, and treatment of preinvasive cervical lesions was \$1,080 to \$2,025 per case.

By financial considerations these costs are justifiable by: 1) averted costs of managing ICC. Even the highest estimate for prevention of an ICC case (\$2,025) would easily be exceeded by the expense of necessary procedures to stage and treat a case of ICC. According to the 1974 International Federation of Gynecology and Obstetrics (FIGO) recommendations, staging involves a complete history, physical examination, and the following diagnostic tests: hematologic, renal and hepatic function tests; chest x-ray; intravenous urogram; cystoscopy, and sigmoidoscopy. Liver scan, bone scan, lymphangiogram and computed tomography may be required to make treatment decisions. Finally, diagnostic surgery is required for paraaortic lymph node sampling for those patients with advanced tumors. Therapies for ICC and its recurrences include hysterectomy, radiation, and chemotherapy. 2) the productivity contributed by the individual both at home and in the work force during her extended years of life.

Beyond these financial considerations, there are in-



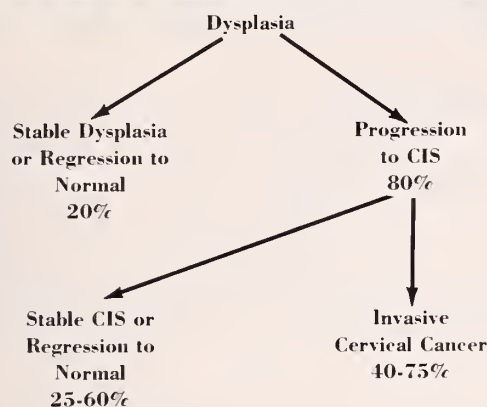


Figure 1. Natural History of Cervical Cancer Precursors<sup>6,7,8</sup>

tangible benefits of ICC prevention. The quality of life without the physical and psychological disruptions of invasive cervical cancer, and the value of extended years of life to the individual cannot be quantified or weighed.

Although ICC is theoretically a preventable chronic disease, it remains an important public health problem — maldistribution of pap screening services has been cited as one reason. Poor and older women are less likely to be pap screened<sup>9</sup> and this failure results too often in the tragic progression to invasive disease. A review of case studies in different settings (Oregon; Aberdeen, Scotland; Manitoba, Canada; and New York City) showed that failure to be pap screened was a major reason that ICC cases had not been prevented and among the ICC cases, 50-73% of the patients had not received a pap test recently despite their frequent use of ambulatory medical services.<sup>10</sup>

Clearly, the preventive potential of the pap smear program of public health clinics can be improved by directing efforts to women who are beyond their childbearing years because the risk of developing cervical cancer increases sharply at the age of 30 and reaches a peak in the fifth through sixth decades of life.<sup>11</sup> While the HCHC and other public health clinics are vital settings for screening young lower socioeconomic and sexually active women who are seen for contraception, pre- and post-natal care, and venereal disease, (and these women are at higher risk for developing cervical cancer), older women are not being seen. Only 13.4% of the HCHC screenees were over 30 years of age.

A recent review of ICC trends in Kentucky between 1971-83 showed that the ICC mortality rate had fallen substantially but with the greatest rate reductions in younger women and in areas with higher socioeconomic

levels. Those authors emphasized the need for more effort by public health clinics and private practitioners to work toward equitable distribution of pap screening services in Kentucky.<sup>4</sup> The present study indicates that although the HCHC cervical cancer screening program is effective in screening high risk segments (lower socioeconomic, sexually active women) of the county's population, the preventive value of the program may be improved by extending these services to women who are beyond their childbearing years.

## Acknowledgment

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**References** 1. Silverberg E: Cancer Statistics, 1986. CA 36(1):9-25, 1986. 2. Rubin P; Bakemeier RF; Krackov SK (eds): Clinical Oncology, sixth ed. American Cancer Society, 1983. 3. Kentucky Epidemiologic Notes and Reports, Vol. 20(5), May 1985. 4. Hinds MW, Skaggs JW, Hernandez C: Cervical Cancer Mortality Trends in Kentucky, 1971-83. *J Ky Med Assoc* 83(4):186-92, 1985. 5. Guzik DJ: Efficacy of Screening for Cervical Cancer: A Review. *Am J Pub Health* 68:125-34, 1978. 6. Richart RM and Barron RM: A Follow-up Study of Patients with Cervical Dysplasia. *Am J Obstet Gynecol* 105:386-393, 1969. 7. Peterson O: Spontaneous Course of Cervical Precancerous Conditions. *Am J Obstet Gynecol* 72:1063-71, 1956. 8. Kottmeier HL: Carcinoma of the Female Genitalia. Baltimore, Williams and Wilkins Co, 1953. 9. Kleinman JC and Kopstein A: Who is Being Screened for Cervical Cancer? *Am J Pub Health* 71:73-76, 1981. 10. Brown RK and Barker WH, Jr: Pap Smear Screening and Invasive Cervical Cancer. *J Fam Pract* 15(5):875-879, 1982. 11. Cramer DW: Uterine Cervix. In *Cancer Epidemiology and Prevention*, Schottenfeld D; Fraumeni JF (eds). Philadelphia: WB Saunders, 1982.

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# Anesthetic Management of a Parturient with Myasthenia Gravis

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*The clinical source of pre-existing myasthenia gravis during pregnancy and the peripartum period is unpredictable. Anesthetic management of the myasthenic parturient depends on the severity of the disease. Regional anesthesia techniques for the pregnant patient with myasthenia gravis classified as mild to moderate will alleviate stress and fatigue during labor and delivery. For those patients with a classification of late severe disease, general anesthesia with controlled ventilation is preferred. Response to anticholinesterase in the early postpartum period is also unpredictable. The risk of neonatal myasthenia is high among babies of myasthenic parturients. The neonate should be observed closely during the first three to six weeks postpartum.*

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**M**yasthenia gravis is an autoimmune disease with decrease in functional acetylcholine receptors at the neuromuscular junction. It is characterized by progressive muscular weakness and easy fatigability. These symptoms are worsened by repeated muscular activity and tend to deteriorate toward the end of the day. All symptoms are generally improved by rest. The most prominently affected muscle groups are the muscles innervated by cranial nerves ("bulbar" musculature), but the muscles of the upper and lower extremities and trunk may be involved. When the muscles of respiration are involved, the symptoms are severe, and fatal or life threatening complications may ensue.

The classification of myasthenia gravis was standardized by Osserman in 1958 and was based on the severity of the disease and the involvement of the muscles of respiration. There are two other systems of classification. One of these is from the University of Virginia and is known as the Modified Osserman Classification. The other system was identified by Simpson who based

his classification on duration and activity of the illness. The difference between classifications is significant, and the clinician has to be alert as to which classification system is being used for his patient. The most widely used classification system is the one by Osserman (Tables 1-3).

Among pediatric groups, there are three classifications of the disease: **Neonatal Transient**, which occurs in 20% of infants born of myasthenic mothers and may require treatment; **Neonatal Persistent**, which has its onset at two to three months of age; and **Juvenile Myasthenia Gravis**, which may develop at any time from birth to puberty and is classified as are adult groups.

The incidence of myasthenia gravis is estimated to be from 1:20,000<sup>1</sup> to 1:40,000.<sup>2</sup> The onset of the disease usually occurs at between 20 and 30 years of age. During this age span, there is a higher female to male ratio (3:1). Myasthenia gravis in women follows a genetic inheritance pattern with the onset of manifestations being near menarche. Of patients dying of myasthenia gravis, there is clearly a majority of non-white females. Twenty percent of female patients experience onset of disease before their 20th birthday, and it usually follows a protracted course. The incidence of the disease peaks in the third decade in women and in the sixth to seventh decade in men.

## Case Report

An 18-year-old white female, primigravida in her 37th week, was admitted to our hospital in active labor. Past history revealed the patient to have undergone thyroidectomy one year previous to this admission and was performed under general anesthesia due to difficulty in swallowing and recurrent generalized muscular weakness that became progressively worse. Her postoperative course was stormy. She required continuous mechanical ventilation for two weeks and eventually had a tracheotomy for prolonged respiratory care.

**TABLE 1**  
**OSSERMAN CLASSIFICATION (1958)**

MG I	Ocular weakness
MG IIa	Mild generalized MG
MG IIb	Severe generalized MG
MG III	Acute fulminating MG
MG IV	Late severe MG
MG V	Early muscle atrophy
MG = myasthenia gravis	

**TABLE 2**  
**MODIFIED OSSERMAN CLASSIFICATION SYSTEM**  
**(UNIVERSITY OF VIRGINIA, 1976)**

Class	Distribution
I	Ocular
II	Mild generalized weakness, usually with ocular muscle weakness
III	Predominantly oropharyngeal involvement, usually with mild generalized weakness
IV	Moderate generalized weakness
V	Severe generalized weakness

During the prenatal period, her predominant myasthenic symptoms were ocular in nature. She needed up to 720 mg daily of pyridostigmine to control her symptoms and was continued on this dosage up to the date of admission. She had undergone regular follow-up examinations from her obstetrician and neurologist.

On admission, fetal maturity was assessed to be satisfactory. Continuous fetal monitoring was used throughout labor. A perinatal care team was available during labor and delivery. There were no signs or symptoms of maternal or fetal distress. Labor was allowed to progress without anesthesia or analgesia until the cervix was dilated to 8 to 9 cm. Peridural anesthesia was administered using a 17-gauge Touhy needle inserted at the L2-L3 interspace with an indwelling catheter in place. Six milliliters of 0.5% xylocaine with epinephrine (1:200,000) was used during labor. After 45 minutes and prior to vaginal delivery, a pudendal dose of 12 ml of 1% xylocaine was administered with the patient in the semi-sitting position.

After a midline episiotomy, a low forceps delivery of a baby boy with Apgar scores of 8 and 10 at one and five minutes, respectively, was accomplished. Initial examination by the pediatric neurologist did not reveal any signs or symptoms of neonatal myasthenia. The mother and child were observed closely for two weeks. The postoperative course was uneventful. The mother was returned to her normal dose of pyridostigmine and advised about the possibility of exacerbation for both herself and her child within six weeks after delivery.

**TABLE 3**  
**SIMPSON CLASSIFICATION (1978)**

Stage I "active" stage	Increasing severity of clinical symptoms with fluctuating course Usually lasts five to 10 years The most labile period
Stage II "inactive" stage	Less fluctuation of symptoms Less labile Follows the initial five to 10 years
Stage III "burned out" stage	Occurs 14 to 20 years after the onset of symptoms Relative absence of fluctuation Frequent permanent weakness Myasthenic myopathy

**TABLE 4**  
**DRUGS TO BE AVOIDED OR USED WITH CAUTION IN MYASTHENICS**

Muscle relaxants - both nondepolarizing and depolarizing
Antiarrhythmic agents (Digitalis, dilantin, lidocaine can be used safely)
Local anesthetic agents, especially esters
Narcotics
Tranquilizers Barbiturates
Inhalation anesthetics Ether, halothane, trichloroethylene
Penicillamine
Beta-adrenergic agents
Aminoglycosides Kanamycin, gentamycin, streptomycin
Other antibiotics Colistin, neomycin, tetracycline, lincomycin, polymyxin
Antihypertensives Guanethadine, hexamethonium - potentiate the effect of depolarizing muscle relaxants, MAO inhibitors have similar effects
Diuretics (Like thiazides and furosemide, they have potassium depleting effect thereby enhancing muscle weakness)
Electrolytes (Low sodium, low calcium and high magnesium interferes with the release of acetylcholine)

## Discussion

The effect of pregnancy on myasthenia gravis is reported to be variable from patient to patient and from pregnancy to pregnancy.<sup>3,4</sup> Exacerbations are most likely to occur in the first trimester with a general leveling off in the second and third trimesters. Adjustment, either up or down, in anticholinesterase medication is likely to occur in all pregnant patients. There is little difference in the management of a pregnant myasthenic patient from the management of any other pregnant patient except for the need to constantly attend to the proper



anticholinesterase dosage. However, the myasthenic patient is particularly sensitive to some drugs (Table 4) and depression of respiration and inspissation of bronchial secretions must be avoided.

During labor and delivery, complications may arise due to the need for anesthesia or analgesia, depending upon the requirement of the patient. As regional anesthetic agents are metabolized in a normal fashion by myasthenics, amide local anesthetics are recommended for most myasthenic parturients except those considered to be of the **late generalized type** or the **acute fulminant type**. The latter type has severe respiratory problems that may require general anesthesia and post-operative mechanical ventilation.

Recent reviews state that medications should be avoided or used with caution in this group of patients. The incriminated drugs include many medications used by anesthesiologists. Many authors state that the use of muscle relaxants is controversial. Hay<sup>3</sup> states that d-tubocurarine is contraindicated. Foldes & McNall<sup>2</sup> report that the use of small doses can produce good muscular relaxation due to increased sensitivity in these patients to nondepolarizing relaxants and suggest taking advantage of the myasthenic's special problem by using a dose of 0.5 to 2.0 mg. The controversy over which analgesic or anesthetic agent to use is ever present. This may be due to the lack of experience with this group for any one physician.

The most likely time for exacerbation of the disease is in the first six weeks after delivery. It is during this time that the patient and the infant must be followed closely for any necessary adjustments in anticholinesterase medication. There is a 10-20% incidence of transient neonatal myasthenia<sup>5</sup> with difficulty in swallowing and respiration that requires treatment for up to three weeks after birth.<sup>6</sup>

There are numerous reports in the literature on the management of the myasthenic patient undergoing surgery and anesthesia, but very little has been written on the anesthetic management of the parturient with myasthenia gravis.

Foldes and McNall<sup>2</sup> mentioned that their preference for anesthesia in this group was a low subarachnoid block for vaginal delivery and high subarachnoid block for cesarean section. McNall and Jafarnia<sup>4</sup> used low spinal anesthesia or caudal anesthesia for the delivery of five myasthenic patients. The use of ester-type local anesthetic agents should also be avoided because the anticholinesterase inhibits the pseudocholinesterase and

reduces the hydrolysis of local anesthetics. Small doses of tetracaine used for subarachnoid block is acceptable.

In summary, to administer anesthesia and analgesia to a pregnant patient for labor and delivery may present a challenge for both the patient and the anesthesiologist. If the patient has myasthenia gravis, an increase in this challenge may be expected. The use of lumbar epidural anesthesia and analgesia with amide local anesthetics offers several advantages:

1. The patient may continue anticholinesterase medication.
2. Analgesia for both labor and delivery are present from a single anesthetic.
3. The use of epidural analgesia for labor avoids the use of the analgesic drugs that are markedly potentiated in this disease. Thus, the situation of having a patient exhausted from the stress of labor with a load of analgesic drugs aboard is avoided.
4. If the need for cesarean section arises, a second anesthetic is not necessary.

Some of these advantages may apply to the non-myasthenic parturient, but they are especially important in this group of patients. Post-delivery follow-up is essential for both mother and infant because of exacerbation of the disease in the mother for up to six weeks and in the infant for up to three months.

**References** 1. Eyer S: Myasthenia gravis and the myasthenic state. *Anesth Rev* 4(7):33-38, 1977. 2. Foldes FF, McNall PG: Myasthenia gravis: A guide for anesthesiologists. *Anesthesiology* 23:837-872, 1962. 3. Hay DM: Myasthenia gravis and pregnancy. *J Obstet Gynaecol Br Comm* 76:323-329, 1969. 4. McNall PG, Jafarnia MR: Management of myasthenia gravis in the obstetrical patient. *Am J Obstet Gynecol* 92:518, 1965. 5. Placche WC: Myasthenia gravis. *Clin Obstet Gynecol* 26(3):592-604, 1983. 6. Abramsky O, Lisak RP, Brenner T, Zeidman A, Beyth Y: Significance in neonatal myasthenia gravis of inhibitory effect of amniotic fluid on binding of antibodies to acetylcholine receptor. *Lancet* 2:1333-1335, 1979.

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# ZOVIRAX® (acyclovir) CAPSULES

**Help free your  
patients from  
recurrences.**

## Daily therapy

Coping with genital herpes is rarely easy. For some, the worst part is the pain and discomfort of frequent attacks — month after month, year after year. For others, the emotional burden presents a more difficult problem, leading to social isolation, anxiety, and diminished self-esteem.

## Prevent or reduce recurrences

Although your patients have to live with herpes, they shouldn't have to suffer. Daily therapy with ZOVIRAX CAPSULES can help free them from the cycle of recurrent genital herpes. For many, one capsule three times a day can suppress recurrences completely while on therapy.

## Generally well tolerated


Daily therapy with ZOVIRAX CAPSULES is generally well tolerated. The most frequent adverse reactions reported during clinical trials were headache, diarrhea, nausea/vomiting, vertigo, and arthralgia.

The physical and emotional difficulties posed by genital herpes are unique for each patient. The frequency and severity of recurrent episodes, as well as the emotional impact of the disease, should be considered when selecting daily therapy with ZOVIRAX CAPSULES.

*Please see brief summary of  
prescribing information on next page.*







"Living in the city  
is lonely enough...  
with herpes it's like  
solitary confinement."

**ZOVIRAX<sup>®</sup>**  
(acyclovir)  
**CAPSULES**

**Prevent genital herpes  
recurrences  
month after month with  
daily therapy.**

(In controlled studies, recurrences were  
totally prevented for 4 to 6 months in up to  
75% of patients.)

*Please see last page of this advertisement for  
brief summary of prescribing information.*



# Prevent recurrences month after month\* **ZOVIRAX®** (acyclovir) **CAPSULES**

## Brief Summary

**INDICATIONS AND USAGE:** Zovirax Capsules are indicated for the treatment of initial episodes and the management of recurrent episodes of genital herpes in certain patients.

The severity of disease is variable depending upon the immune status of the patient, the frequency and duration of episodes, and the degree of cutaneous or systemic involvement. These factors should determine patient management, which may include symptomatic support and counseling only, or the institution of specific therapy. The physical, emotional and psychosocial difficulties posed by herpes infections as well as the degree of debilitation, particularly in immunocompromised patients, are unique for each patient, and the physician should determine therapeutic alternatives based on his or her understanding of the individual patient's needs. Thus Zovirax Capsules are not appropriate in treating all genital herpes infections. The following guidelines may be useful in weighing the benefit/risk considerations in specific disease categories:

**First Episodes** (primary and nonprimary infections — commonly known as initial genital herpes):

Double-blind, placebo-controlled studies have demonstrated that orally administered Zovirax significantly reduced the duration of acute infection (detection of virus in lesions by tissue culture) and lesion healing. The duration of pain and new lesion formation was decreased in some patient groups. The promptness of initiation of therapy and/or the patient's prior exposure to Herpes simplex virus may influence the degree of benefit from therapy. Patients with mild disease may derive less benefit than those with more severe episodes. In patients with extremely severe episodes, in which prostration, central nervous system involvement, urinary retention or inability to take oral medication require hospitalization and more aggressive management, therapy may be best initiated with intravenous Zovirax.

## Recurrent Episodes:

Double-blind, placebo-controlled studies in patients with frequent recurrences (6 or more episodes per year) have shown that Zovirax Capsules given for 4 to 6 months prevented or reduced the frequency and/or severity of recurrences in greater than 95% of patients. Clinical recurrences were prevented in 40 to 75% of patients. Some patients experienced increased severity of the first episode following cessation of therapy; the severity of subsequent episodes and the effect on the natural history of the disease are still under study.

The safety and efficacy of orally administered acyclovir in the suppression of frequent episodes of genital herpes have been established only for up to 6 months. Chronic suppressive therapy is most appropriate when, in the judgement of the physician, the benefits of such a regimen outweigh known or potential adverse effects. In general, Zovirax Capsules should not be used for the suppression of recurrent disease in mildly affected patients. Unanswered questions concerning the human relevance of *in vitro* mutagenicity studies and reproductive toxicity studies in animals given very high doses of acyclovir for short periods (see Carcinogenesis, Mutagenesis, Impairment of Fertility) should be borne in mind when designing long-term management for individual patients. Discussion of these issues with patients will provide them the opportunity to weigh the potential for toxicity against the severity of their disease. Thus, this regimen should be considered only for appropriate patients and only for six months until the results of ongoing studies allow a more precise evaluation of the benefit/risk assessment of prolonged therapy.

Limited studies have shown that there are certain patients for whom intermittent short-term treatment of recurrent episodes is effective. This

approach may be more appropriate than a suppressive regimen in patients with infrequent recurrences.

Immunocompromised patients with recurrent herpes infections can be treated with either intermittent or chronic suppressive therapy. Clinically significant resistance, although rare, is more likely to be seen with prolonged or repeated therapy in severely immunocompromised patients with active lesions.

**CONTRAINDICATIONS:** Zovirax Capsules are contraindicated for patients who develop hypersensitivity or intolerance to the components of the formulation.

**WARNINGS:** Zovirax Capsules are intended for oral ingestion only.

**PRECAUTIONS:** General: Zovirax has caused decreased spermatogenesis at high doses in some animals and mutagenesis in some acute studies at high concentrations of drug (see PRECAUTIONS — Carcinogenesis, Mutagenesis, Impairment of Fertility). The recommended dosage and length of treatment should not be exceeded (see DOSAGE AND ADMINISTRATION).

Exposure of Herpes simplex isolates to acyclovir *in vitro* can lead to the emergence of less sensitive viruses. The possibility of the appearance of less sensitive viruses in man must be borne in mind when treating patients. The relationship between the *in vitro* sensitivity of Herpes simplex virus to acyclovir and clinical response to therapy has yet to be established.

Because of the possibility that less sensitive virus may be selected in patients who are receiving acyclovir, all patients should be advised to take particular care to avoid potential transmission of virus if active lesions are present while they are on therapy. In severely immunocompromised patients, the physician should be aware that prolonged or repeated courses of acyclovir may result in selection of resistant viruses which may not fully respond to continued acyclovir therapy.

**Drug Interactions:** Co-administration of probenecid with intravenous acyclovir has been shown to increase the mean half-life and the area under the concentration-time curve. Urinary excretion and renal clearance were correspondingly reduced.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Acyclovir was tested in lifetime bioassays in rats and mice at single daily doses of 50, 150 and 450 mg/kg given by gavage. There was no statistically significant difference in the incidence of tumors between treated and control animals, nor did acyclovir shorten the latency of tumors. In 2 *in vitro* cell transformation assays, used to provide preliminary assessment of potential oncogenicity in advance of these more definitive life-time bioassays in rodents, conflicting results were obtained. Acyclovir was positive at the highest dose used in one system and the resulting morphologically transformed cells formed tumors when inoculated into immunosuppressed, syngeneic, weanling mice. Acyclovir was negative in another transformation system considered less sensitive.

In acute studies, there was an increase, not statistically significant, in the incidence of chromosomal damage at maximum tolerated parenteral doses of 100 mg/kg acyclovir in rats but not Chinese hamsters; higher doses of 500 and 1000 mg/kg were clastogenic in Chinese hamsters. In addition, no activity was found after 5 days dosing in a dominant lethal study in mice. In 6 of 11 microbial and mammalian cell assays, no evidence of mutagenicity was observed. At 3 loci in a Chinese hamster ovary cell line, the results were inconclusive. In 2 mammalian cell assays (human lymphocytes and L5178Y mouse lymphoma cells *in vitro*), positive responses for mutagenicity and chromosomal damage occurred, but only at concentrations at least 400 times the acyclovir plasma levels achieved in man.

Acyclovir has not been shown to impair fertility or reproduction in mice (450 mg/kg/day, p.o.) or in rats (25 mg/kg/day, s.c.). At 50 mg/kg/day s.c. in the rat, there was a statistically significant increase in post-implantation loss, but no concomitant decrease in litter size. In female rabbits treated subcutaneously with acyclovir subsequent to mating, there was a statistically significant decrease in implantation efficiency but no concomitant decrease in litter size at a dose of 50 mg/kg/day. No effect upon implantation efficiency was observed when the same dose was administered intravenously. In a rat peri- and postnatal study at 50 mg/kg/day s.c., there was a statistically significant decrease in the group mean numbers of corpora lutea, total implantation sites and live fetuses in the F<sub>1</sub> generation. Although not statistically signifi-

cant, there was also a dose related decrease in group mean numbers of live fetuses and implantation sites at 12.5 mg/kg/day and 25 mg/kg/day, s.c. The intravenous administration of 100 mg/kg/day, a dose known to cause obstructive nephropathy in rabbits, caused a significant increase in fetal resorptions and a corresponding decrease in litter size. However, at a maximum tolerated intravenous dose of 50 mg/kg/day in rabbits, there were no drug-related reproductive effects.

Intraperitoneal doses of 320 or 80 mg/kg/day acyclovir given to rats for 1 and 6 months, respectively, caused testicular atrophy. Testicular atrophy was persistent through the 4-week post-dose recovery phase after 320 mg/kg/day; some evidence of recovery of sperm production was evident 30 days postdose. Intravenous doses of 100 and 200 mg/kg/day acyclovir given to dogs for 31 days caused aspermatogenesis. Testicles were normal in dogs given 50 mg/kg/day, i.v. for one month.

**Pregnancy: Teratogenic Effects:** Pregnancy Category C. Acyclovir was not teratogenic in the mouse (450 mg/kg/day, p.o.), rat (50 mg/kg/day, s.c.) or rabbit (50 mg/kg/day, s.c. and i.v.). There are no adequate and well-controlled studies in pregnant women. Acyclovir should not be used during pregnancy unless the potential benefit justifies the potential risk to the fetus. Although acyclovir was not teratogenic in animal studies, the drug's potential for causing chromosome breaks at high concentration should be taken into consideration in making this determination.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Zovirax is administered to a nursing woman. In nursing mothers, consideration should be given to not using acyclovir treatment or discontinuing breastfeeding.

**Pediatric Use:** Safety and effectiveness in children have not been established.

## ADVERSE REACTIONS — Short-Term

**Administration:** The most frequent adverse reactions reported during clinical trials were nausea and/or vomiting in 8 of 298 patient treatments (2.7%) and headache in 2 of 298 (0.6%). Less frequent adverse reactions, each of which occurred in 1 of 298 patient treatments (0.3%), included diarrhea, dizziness, anorexia, fatigue, edema, skin rash, leg pain, inguinal adenopathy, medication taste and sore throat.

**Long-Term Administration:** The most frequent adverse reactions reported in studies of daily therapy for 3 to 6 months were headache in 33 of 251 patients (13.1%), diarrhea in 22 of 251 (8.8%), nausea and/or vomiting in 20 of 251 (8.0%), vertigo in 9 of 251 (3.6%), and arthralgia in 9 of 251 (3.6%). Less frequent adverse reactions, each of which occurred in less than 3% of the 251 patients (see number of patients in parentheses), included skin rash (7), insomnia (4), fatigue (7), fever (4), palpitations (1), sore throat (2), superficial thrombophlebitis (1), muscle cramps (2), pars planitis (1), menstrual abnormality (4), acne (3), lymphadenopathy (2), irritability (1), accelerated hair loss (1), and depression (1).

**DOSAGE AND ADMINISTRATION: Treatment of initial genital herpes:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 10 days (total 50 capsules).

**Chronic suppressive therapy for recurrent disease:** One 200 mg capsule 3 times daily for up to 6 months. Some patients may require more drug, up to one 200 mg capsule 5 times daily for up to 6 months.

**Intermittent Therapy:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 5 days (total 25 capsules). Therapy should be initiated at the earliest sign or symptom (prodrome) of recurrence.

**Patients With Acute or Chronic Renal Impairment:** One 200 mg capsule every 12 hours is recommended for patients with creatinine clearance  $\leq 10$  ml/min/1.73 m<sup>2</sup>.

**HOW SUPPLIED:** Zovirax Capsules (blue, opaque) containing 200 mg acyclovir and printed with "Wellcome ZOVIRAX 200". Bottles of 100 (NDC-0081-0991-55) and unit dose pack of 100 (NDC-0081-0991-56).

Store at 15°-30°C (59°-86°F) and protect from light.

\*In controlled studies, recurrences were totally prevented for 4 to 6 months in up to 75% of patients.



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# A WORD TO THE WHYS

## WHY AMA?

The AMA has tackled the issue of cost effective quality medical care by supporting the development of health care coalitions. The Association believes the best mechanism for keeping health costs down without sacrificing quality or accessibility is through voluntary coalitions in which physicians actively participate. Working to promote high quality, affordable medical care in the United States: it's one more good reason why you should be a part of the AMA.

## WHY AMA?

The AMA has actively sought to attract women as members and leaders in organized medicine. Ongoing AMA projects and concentrated efforts by county, state, and specialty societies have significantly increased the leadership role and membership of women in organized medicine. Strengthening the voice of women in medicine through encouraging active participation: it's one more good reason why you should be a part of the AMA.

## WHY AMA?

Through the AMA library you can have immediate access to a vast store of medical, scientific, and socio-economic information. The library maintains a large collection of books, journals, and microfilm and provides instant on-line access to countless information sources through computerized data bases. The AMA library: it's one more good reason why you should be part of the AMA.

**To Join,** Contact your county or state medical society or write:  
Division of Membership, AMA, 535 North Dearborn Street, Chicago,  
Illinois 60610 or call collect, (312) 751-6196.



# Care, Coverage, and Competition

**M**edical editorials are risky. We express concerns, we show our pride and our prejudice, even our age. When an editorial points with alarm and bemoans the passing of old days and ways it is easier to be selfish than magnanimous, to be angry more than forgiving. There is a temptation to retire, muttering of ethics and quality and dignity and respect, to those little islands of professionalism where Real Doctors are still Physicians.

Alas, those islands are fast eroding and even the most conservative of us sense that unless we find a lifeboat we'll soon be treading about in an unappetizing soup of astrologers, chiropractors, tea leaf readers and others Certifiably Ignorant.

We are cautious when we praise Medicine lest we sound trite. Surely Medicine has its stuffy, hidebound ways. Our compulsiveness and now our fear contribute to costs. Some of use are selfish and thoughtless. But in our own *Journal* we should say some good things about ourselves since no one else does that very much anymore. When we really love something or someone the praise is unmistakably genuine. Most of us really love Medicine, a lovely, lively, deadly system, part science, part art, of trying to set things right in the psyche and the soma. It teaches us that there is always more to be learned from the vast pool of things that are known—but that this is still but a tiny fragment of Truth. It teaches that however much we know, there is even more to be sensed and without sensitivity the knowledge may not suffice.

Such high-flown, self-serving thought are but preamble to expressing two concerns. First, there is the problem of Care versus Coverage, resplendent with elements of ethics and economics. Indeed, economics, with its concepts of (may God forgive us!) Marketing, has squeezed ethics off to the side where, sequestered with a few zealots, it can't do any harm. Of Marketing we are splendidly naive, but it can pit friend against friend so that we are the more easily divided and conquered. Care means individualizing. Coverage means cubbyholes, trimming people to fit codes. Care means offering treatment in the context of that patient's needs and resources. Coverage means a bored phone clerk who tells me in her first breath that she is recording our

conversation, presumably to reduce my inclination to lie. Care means paying more attention to the patient than to the chart. Coverage means glossy brochures suggesting joyful healing that no one ever has to pay for.

The second concern is that the pressures under which we live and work, those that should make us compete healthfully with each other, could turn us **against** each other. Somehow, we've got to learn to keep our tempers and to compete without vindictiveness or anger.

We're getting jammed into some peculiar relationships these days, with strains on every side. No one in medicine is uninfluenced; we didn't create this predicament, we can't stop it. Only stockholders are pleased and some of them aren't as happy as they once were. Our reluctant rush into HMO's, IPA's, PPO's and OWA's\* is a sign of the times. Where once we only wanted to be left alone to heal well and always to heal better, now we make strange compromises. We've sometimes become party to inglorious relationships when we could see no other way.

Unity and fraternity, join or don't join, have always been pleasurable options in medicine. They are options no longer. Only the jackals feed when the lions tear each other to bits. History, in case there's anyone around to write it, will find some areas of Medicine's failure in these tempestuous times, but let's make sure it finds that individually and as colleagues, as conferees, we did our best, that we did *"not go quietly into that good night."*

David Stewart, M.D.

\*Other Weird Arrangements



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This means that Kentucky physicians can obtain coverage for their medical practice, homes, cars and other possessions, at very attractive rates, from

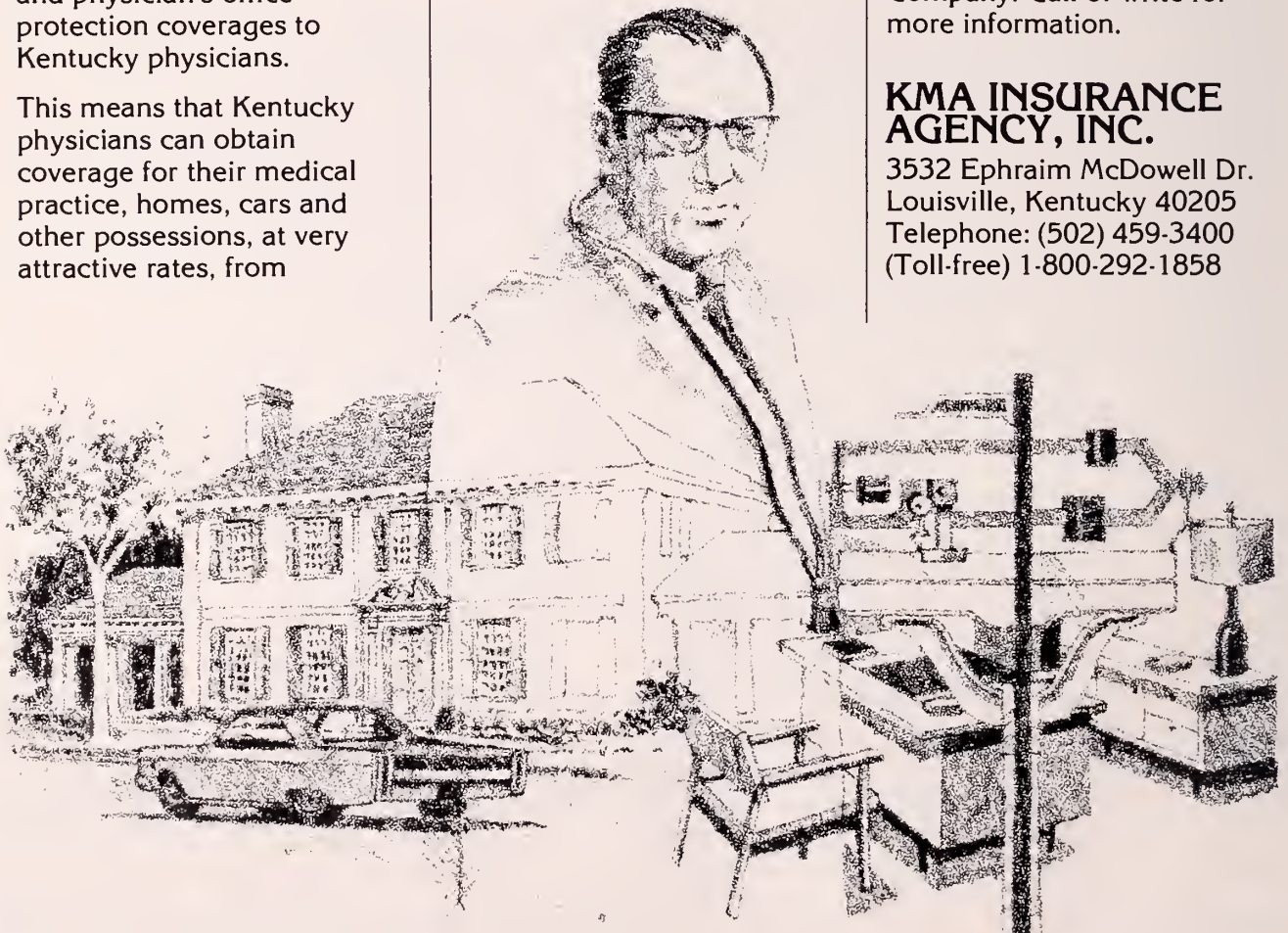
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Before prescribing, see complete prescribing information in SK&F CO. literature or PDR. The following is a brief summary.

**\* WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

**Precautions:** The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin (ACTH)). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other anti-hypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

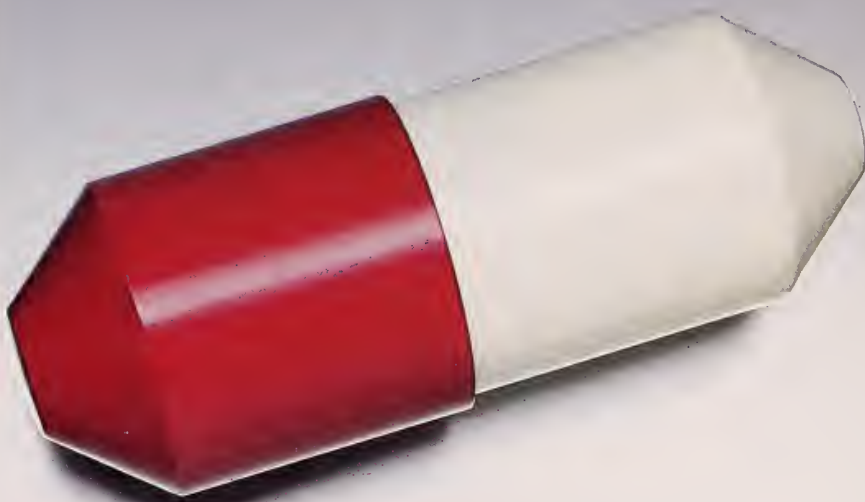
**Supplied:** 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BRS-DZ.L42

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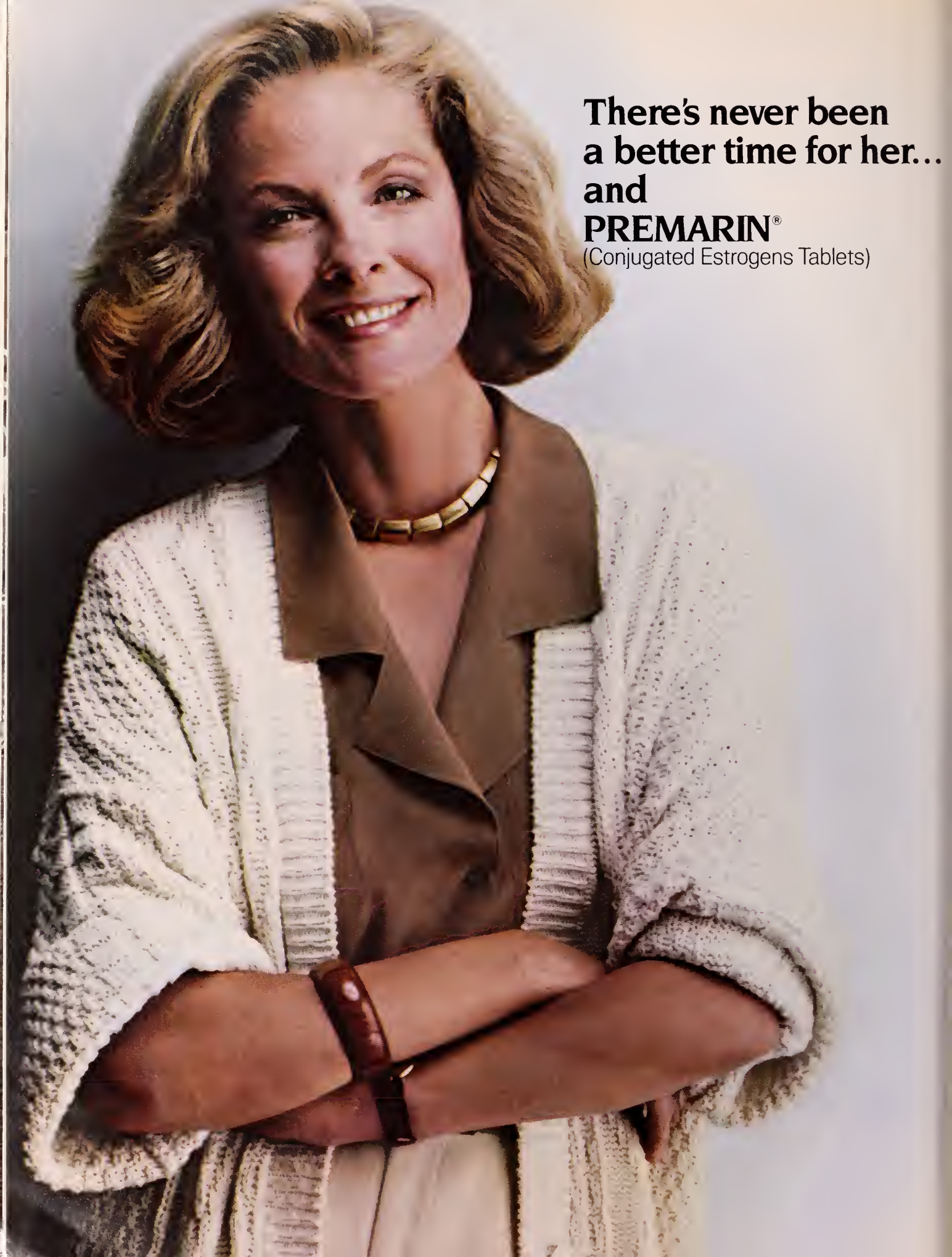
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# **Now the evidence looks better than ever**

## **Significantly reduced risk of endometrial hyperplasia**

Endometrial hyperplasia was significantly reduced when progestin was added to PREMARIN therapy for more than ten days a month.<sup>1-4</sup> The risk of endometrial hyperplasia may also be reduced through cyclic administration of unopposed, low-dose PREMARIN.

## **Effect on lipids—an important feature**

PREMARIN used alone does not adversely affect lipid levels. In fact, a clinical study has shown a significant increase in HDL cholesterol—from 49.7 mg/dL to 56.4 mg/dL—and decrease in LDL cholesterol—from 165.1 mg/dL to 138.1 mg/dL—after one year of therapy with PREMARIN, 0.625 mg.<sup>5</sup>

## **Low-dose control of menopausal symptoms\***

PREMARIN effectively relieves vasomotor symptoms, such as hot flashes. When estrogen deficiency is limited to atrophic vaginitis, PREMARIN® (conjugated estrogens) Vaginal Cream restores the vaginal environment to its premenopausal state.

**The most widely used, most extensively studied estrogen worldwide.**

**PREMARIN®**  
(Conjugated Estrogens Tablets)

**Most trusted for more reasons**

\*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

Please see following page for brief summary of prescribing information.



For moderate-to-severe  
vasomotor symptoms

## PREMARIN® (Conjugated Estrogens Tablets)



0.3 mg 0.625 mg 0.9 mg 1.25 mg 2.5 mg

The appearance of these tablets is a trademark of Ayerst Laboratories.

**BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)**

**PREMARIN® Brand of conjugated estrogens tablets, USP**  
**PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base**

### 1 ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equestrogenic doses.

### 2 ESTROGENS SHOULD NOT BE USED DURING PREGNANCY

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

**DESCRIPTION:** PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17 $\alpha$ -dihydroequilin, together with smaller amounts of 17 $\alpha$ -estradiol, equilenin, and 17 $\alpha$ -dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

**INDICATIONS AND USAGE:** PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe vasomotor symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) Osteoporosis (abnormally low bone mass). Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

**Concomitant Progestin Use:** The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

**CONTRAINDICATIONS:** Estrogens should not be used in women (or men) with any of the following conditions: 1 Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2 Known or suspected estrogen-dependent neoplasia. 3 Known or suspected pregnancy (See Boxed Warning). 4 Undiagnosed abnormal genital bleeding. 5 Active thrombophlebitis or thromboembolic disorders. 6 A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

**WARNINGS:** Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

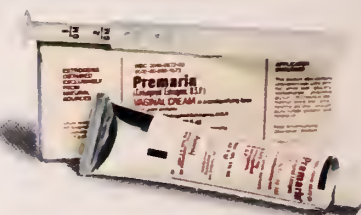
Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement, it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with

For atrophic vaginitis

## PREMARIN® (Conjugated Estrogens)

Vaginal  
Cream

0.625mg/g



caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

**PRECAUTIONS:** Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives have been associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

- Increased sulfobromophthalen retention
- Increased prothrombin and factors VII, VIII, IX, and X, decreased antithrombin 3; increased norepinephrine-induced platelet aggregability
- Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered
- Impaired glucose tolerance
- Decreased pregnandiol excretion
- Reduced response to metyrapone test
- Reduced serum folate concentration
- Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

**ADVERSE REACTIONS:** The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow, dysmenorrhea, premenstrual-like syndrome, amenorrhea during and after treatment, increase in size of uterine fibromyoma, vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating, cholestatic jaundice, chloasma or melasma which may persist when drug is discontinued, erythema multiforme, erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature, intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

**ACUTE OVERDOSAGE:** May cause nausea, and withdrawal bleeding may occur in females.

### DOSEAGE AND ADMINISTRATION:

**PREMARIN® Brand of conjugated estrogens tablets, USP**

- Given cyclically for short-term use only. For treatment of moderate to severe vasomotor symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.
- Given cyclically. Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

**PREMARIN® Brand of conjugated estrogens Vaginal Cream**

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

### References:

- Whitehead MI, Townsend PT, Pryse-Davies J, et al. Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605.
- Paterson MEL, Wade-Evans T, Sturdee DW, et al. Endometrial disease after treatment with estrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824.
- Magos AL, Brincat M, Studd JWW, et al. Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985;67:496-499.
- Whitehead MI, Lane G, Siddle N, et al. Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:41-52.
- Barnes RB, Roy S, Lobo RA. Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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# IMAGINE A MACHINE THAT CAN DO THIS TO RENAL CALCULI

We're proud to announce the introduction of Extracorporeal Shock Wave Lithotripsy as a new feature of our kidney stone treatment program. This new device makes it possible to pulverize and eliminate kidney stones without invasive surgery. Now you have the opportunity to participate in this state-of-the-art procedure at CAMC's High Tech Center here in Charleston, West Virginia.

The Lithotripter uses shock waves to bombard kidney stones into sand-like particles inside the body. The residue is then easily passed. Although the theory behind Lithotripsy is simple, the process is precise. The stone is pinpointed inside the body with fluoroscopy and shock wave firing is synchronized with the patient's heartbeat by electrocardiogram. Usually, the entire process takes about an hour.

As you can imagine, Lithotripsy offers many benefits to kidney stone patients. The process is less painful, entails fewer side effects, and recuperation is quicker than with conventional surgery. It's even less expensive than surgery.

We're encouraging all area urologists to apply for privileges in Extracorporeal Shock Wave Lithotripsy. We invite you to visit CAMC and see the lithotripter in action. Come and learn about this revolutionary therapy which is the wave of the future in kidney stone treatment. We will happily provide you with a brochure for your use as well as brochures for your patients.

For your brochures or other information about Lithotripsy and our kidney stone treatment program, call CAMC at 1-800-654-0159.

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Good Samaritan Hospital's Orthopedics & Neurosciences Center is an undisputed leader in treating orthopedic, neurological and neurosurgical-related diseases and injuries.

Good Samaritan's 87-bed Center offers a full range of diagnostic and treatment modalities for both adults and children, including a special 11-bed unit for care of complicated or critical cases.



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or our 24-hour, toll-free physician number: **1-800-432-5088**

For published material on the Center, call **252-6612, Ext. 3801**

*Good Samaritan Hospital*

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Lexington, Ky. 40508

**(606) 252-6612**



# COMPETITIVE INTERDEPENDENCE

You are invited to attend "COMPETITIVE INTERDEPENDENCE," a two-day seminar on the professional liability crisis and socio-economic innovations in medical practices.


The program includes several nationally renowned speakers who will discuss topics such as the following:

- "Maintaining Quality Care in a Hostile Liability Environment/JCAH Initiatives"
- "Evaluation of Alternative Delivery Systems in Kentucky"
- "Enhancing Your Image/Marketing Your Practice"
- "Physicians/Hospital DRGs/Who Cuts the Pie?"
- "Risk Management/Alternative to Tort Reform and Altered Insurance Mechanisms"

The "COMPETITIVE INTERDEPENDENCE" Seminar will be held Wednesday and Thursday, March 11 and 12, 1987, at the Hyatt Regency Lexington, Lexington, Kentucky.

The hotel has reserved a block of rooms for Kentucky Medical Association participants. SPECIAL ROOM RATES will be offered through February 11, 1987. Please see program reservation form for details.

## "PROGRAM RESERVATION FORM"



"COMPETITIVE INTERDEPENDENCE," a two-day seminar on professional liability in a diverse medical market place, is open to all members of the Kentucky Medical Association, their spouses and other medically-related groups. A registration fee of \$75.00 per person will be charged. The fee includes a continental breakfast, lunch, dinner, and refreshments during breaks on Wednesday, March 11; and a continental breakfast, and refreshments during breaks on Thursday, March 12. Lodging reservations may be obtained by contacting the Hyatt Regency Lexington at (606) 253-1234. Rooms are \$46 (single) and \$54 (double).

**PLEASE REGISTER ME FOR THE SEMINAR**  
(INCLUDE PAYMENT WITH REGISTRATION FORM)

\_\_\_\_\_ MEMBER \_\_\_\_\_ SPOUSE \_\_\_\_\_ OTHER

NAME \_\_\_\_\_

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RETURN TO: Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205

• Accreditation has been applied for from the American Academy of Family Physicians and the Kentucky Medical Association.



## KMA Presents COMPETITIVE INTERDEPENDENCE A Two Day Seminar On Professional Liability —In a Diverse Medical Market Place—

March 10, 1987 Tuesday Evening		Jeffrey Denning, Conomikes Associates, Marina del Rey, California	
8 p.m. 9 p.m.	<b>RECEPTION</b>	4:15 p.m.	<b>"THE KENTUCKY CONSTITUTION/ RESTRAINTS TO ALTERING THE CIVIL JUSTICE SYSTEM"</b> Charles M. Leibson, J.D., Justice, Supreme Court of Kentucky
March 11, 1987 Wednesday Morning		5:00 p.m. 5:45 p.m. 7:30 p.m. 8:30 p.m.	
7:15-8:15 a.m.	<b>CONTINENTAL BREAKFAST</b>	<b>ADJOURN</b>	
8:15 a.m.	Wally O. Montgomery, M.D., Chairman, KMA Ad Hoc Committee on Professional Liability Insurance, Presiding	<b>RECEPTION/CASH BAR</b>	
8:30 a.m.	<b>"THE KENTUCKY EXPERIENCE/WHERE HAVE WE BEEN/WHERE ARE WE GOING/WHEN IT WILL ALL END"</b> Richard F. Hench, M.D., President, KMA	<b>DINNER</b>	
8:45 a.m.	<b>"PROFESSIONAL LIABILITY/PROPOSAL FOR REFORM"</b> Jeffrey O'Connell, J.D., Professor of Law, University of Virginia	<b>PROGRAM</b> Richard F. Hench, M.D., Presiding <b>"ADMINISTRATIVE INITIATIVES TO SOCIALIZE AMERICAN MEDICINE"</b> John S. Zapp, D.D.S., Director, Washington Office, American Medical Association	
9:45 a.m.	<b>"LOBBYING IS A CONTACT SPORT"</b> Mack J. Morgan, Jr., President, Kentucky Re- tail Federation	March 12, 1986 Thursday Morning Donald C. Barton, M.D. KMA President-Elect, Presiding	
10:15 a.m.	<b>BREAK</b>	7:30 a.m.	<b>BUFFET BREAKFAST</b>
10:30 a.m.	<b>"THE KMA PR CAMPAIGN FOR TORT REFORM"</b> Jessica Schikler, Vice President, Wenz-Neeley, Tom Preston, President, Preston Associates	8:30 a.m.	<b>"RISK MANAGEMENT/ALTERNATIVE TO TORT REFORM AND ALTERED INSURANCE MECHANISMS"</b> Speaker to be announced
11:15	<b>"MEDICAL MALPRACTICE/THE NEXT FIVE YEARS"</b> Carl L. Wedekind, J.D., President, KMIC	9:15 a.m.	<b>"ETHICS OF QUALITY CARE VS. ECONOMIC CONSTRAINTS OF COST CONTAINMENT"</b> B. J. Anderson, J. D., American Medical Association
11:45 a.m.	<b>LUNCH</b> Richard F. Hench, M.D., Presiding Gubernatorial Candidates	10:00 a.m.	<b>BREAK</b>
	Wednesday Afternoon Nelson B. Rue, M.D., Chairman, KMA Board of Trustees, Presiding	10:15 a.m.	<b>"MAINTAINING QUALITY CARE IN A HOSTILE LIABILITY ENVIRONMENT/JCAH INITIATIVES"</b> Dennis S. O'Leary, M.D., President Joint Commission of the Accreditation of Hospitals
2:30 p.m.	<b>"EVOLUTION OF ALTERNATE DELIVERY SYSTEMS IN KENTUCKY"</b> Nelson B. Rue, M.D., Chairman, KMA Trends Committee	11:00 a.m.	<b>"THE LIABILITY SITUATION/FOUR PERSPECTIVES"</b> LEGISLATIVE - Representative William M. Lear, Jr., J.D. - Lexington ACTUARIAL - Eric Tachau - Insurance Executive, Louisville TRIAL ATTORNEY - Joe C. Savage, J.D. - President, Kentucky Bar Association - Lexington BUSINESS - Tony Scholar, Director, Govern- ment Affairs, Kentucky Chamber of Com- merce - Frankfort
3:00 p.m.	<b>"REGAINING CONTROL/CONTRACT ANALYSIS NEGOTIATIONS AND EVALUATION"</b> Charles J. Cronan, IV, KMA Legal Counsel, Louisville, KY		<b>WRAP-UP AND ADJOURNMENT</b> Richard F. Hench, M.D.
3:30 p.m.	<b>"ENHANCING YOUR IMAGE/MARKETING YOUR PRACTICE"</b>	12:00 Noon	

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## Kentucky Medical Management & Computer Operations, Inc.

# Miss Liberty, IBM and KMCO



October 28 will mark the 100th anniversary of the unveiling of the Statue of Liberty. IBM hasn't been around quite that long, but the computer heavyweight is older than you may think. It was founded in 1911, just 25 years after Miss Liberty first stretched her torch high above Bedloe Island in New York Harbor.

Like Miss Liberty, IBM has become a shining part of America's history and tradition. Now IBM and KMCO have joined hands to offer doctors an effective, dependable office computer system.

We're not quite as poetic as Miss Liberty's "I lift my lamp beside the golden door," but we at KMCO would welcome the opportunity to talk with you about a system for your medical practice.

Reach us by phone at 451-2095 in Louisville, 1-800-292-1675 outside Louisville. Or write Bob Laudeman, Sales Manager, KMCO, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

## 1,615 Call Kentucky Helpline

Potentially blinding eye disease can be treated effectively if detected early, a fact that 1,615 elderly Kentucky residents have discovered through the National Eye Care Project (NECP).

Volunteer Kentucky ophthalmologists have uncovered:

- 233 cases of cataracts,
- 21 cases of glaucoma,
- 50 cases of macular degeneration,
- 10 cases of diabetic retinopathy,

among elderly Kentucky residents who have called the toll-free Helpline—1-800-222-EYES (3937)—to receive assistance through the NECP.

The public service, which offers medical eye care to the disadvantaged elderly at no out-of-pocket cost, is sponsored by the Kentucky Academy of Eye Physicians and Surgeons and the Foundation of the American Academy of Ophthalmology.

The NECP is available to U.S. citizens or legal residents, age 65 or over, who are not currently under the care of an ophthalmologist, and who have not seen one within the past three years.

“We want elderly people to know that failing eyesight in their later years can be prevented or lessened through early diagnosis and treatment,” said Bryan N. Prater, MD, president of the Kentucky Academy of Eye Physicians and Surgeons. “We are now able to repair or even replace certain parts of the eye by using sophis-



ticated surgical tools and important new drug therapies.”

Since the Kentucky Helpline opened on May 19, more than 1,615 residents have called, resulting in more than 1,140 referrals of elderly patients to local volunteer eye physicians for medical examination and possible treatment for sight-threatening eye diseases.



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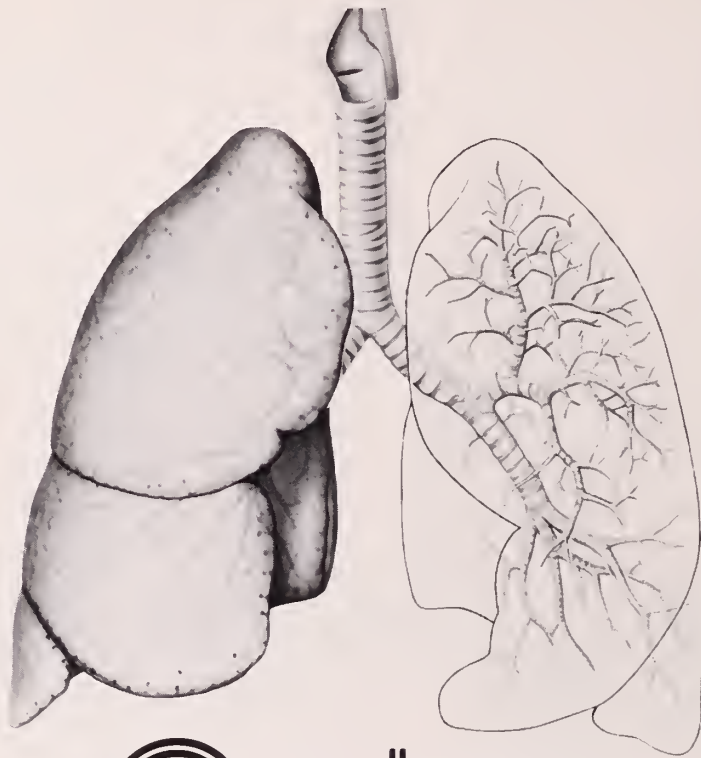
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# Consider the causative organisms...



**Ceclor<sup>®</sup>**  
ceclor

**250-mg Pulvules<sup>®</sup> t.i.d.**

**offers effectiveness against  
the major causes of bacterial bronchitis**

***Haemophilus influenzae*, *H influenzae*, *Streptococcus pneumoniae*, *Streptococcus pyogenes***  
(ampicillin-susceptible) (ampicillin-resistant)

**Note:** Ceclor<sup>®</sup> is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

#### **Ceclor<sup>®</sup>** (ceclor)

**Summary:** Consult the package literature for prescribing information.

**Indications:** Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

**Contraindications:** Known allergy to cephalosporins.

**Warnings:** CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-

associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

#### **Precautions:**

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor

penetrates mother's milk. Exercise caution in prescribing for these patients.

#### **Adverse Reactions:** (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%.

#### **Abnormalities in laboratory results of uncertain etiology**

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis; elevations in BUN or serum creatinine
- Positive direct Coombs' test
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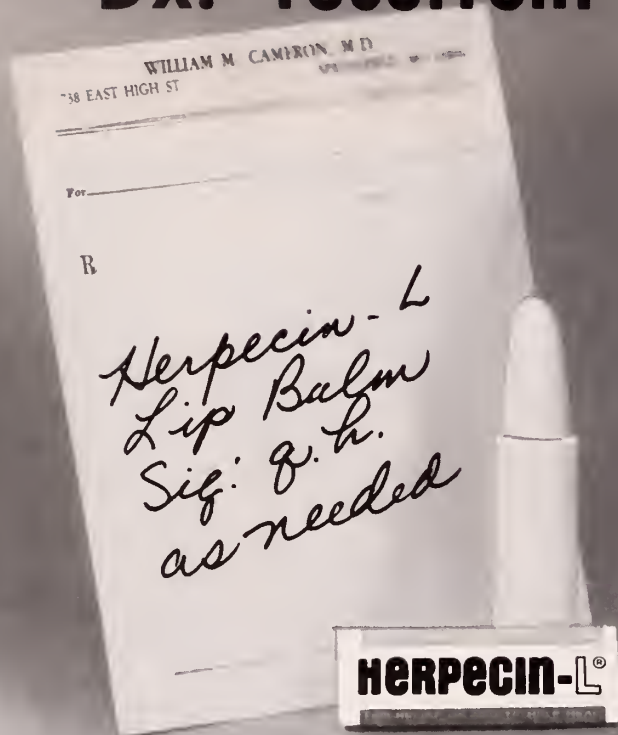
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## Patricia J. Longworth Joins KMA Staff



Patricia J. Longworth has joined the Headquarters Staff of the Kentucky Medical Association as Executive Assistant. The 1982 graduate of the University of Akron has extensive experience with the news media and in public relations, and was formerly Director of Public Relations and Assistant Director of Admissions at Spencerian College in Louisville.

Patricia J. Longworth

Annual Meeting, The Virginia Society of Ophthalmology, May 14-17, 1987, Sheraton Tysons Corner in Northern Virginia. Co-sponsored by Georgetown University Ophthalmology Department, Michael Lemp, M.D., Chairman. Guest Speakers: Thom J. Zimmerman, M.D.; A. Robert Bellows, M.D.; Kenneth Buol-Heslin, M.D.; Richard L. Lindstrom, M.D. For information, contact Donna Strawderman, 4205 Dover Road, Richmond, Virginia 23221 (804) 353-2721.



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# **Polypharmacy in the Elderly**

**HERBERT WAGEMAKER, M.D. AND ROBERT CADE, M.D.**

A 79-year-old woman is seen with a history of sleeplessness, intermittent confusion and agitation, trouble with her memory, and signs of depression. She also has problems with diarrhea, shortness of breath and weakness. This is somewhat typical of what one sees in older patients. In the past year she has been on 27 different medications for these problems. She was still on seven of them when seen in our clinic for the first time. This, unfortunately, is also somewhat typical of older patients. Many of them are on numerous medications.

During the year, the patient was on dalmane (flurazepam), serax (oxazepam), xanax (alprazolam), and halcion (triazolam), all benzodiazepines. These were probably started because she was having problems sleeping.

Sleeping is a big problem for the elderly. Many times they are prescribed benzodiazepines for this, sometimes more than one at a time. This patient was tried on five, three at the same time. When I see a patient with problems sleeping, I try to avoid benzodiazepines for several reasons. First of all, they can be addictive. Not infrequently I see patients who have remained on these medications for 10 years or more. Discontinuing the medication in these instances becomes virtually impossible. Fifty percent of patients in a double-blind study of short durations were reported to have experienced some withdrawal symptoms when benzodiazepines were abruptly discontinued and a placebo substituted for them.<sup>1</sup> Secondly, there is a real question in their usefulness in sleep disorders after 30 days or so.<sup>2</sup> The third reason is that they can cause confusion and disorientation along with lethargy.

This patient also presented with dementia. Frequently she was confused, disoriented, and had problems with her memory. In addition to benzodiazepines, she was on phenaphen, codeine, paregoric, Mellaril® (thioridazine), Tagamet® (cimetidine), Asendin® (amoxapine), Phenergan® (promethazine), Bentyl® (dicyclomine hydrochloride), Donnaset®, Donnatal® (phenobarb, hyoscyamine, atropine, scopolamine), Vicaden® (hydrocodone bitartrate, acetaminophen), Vistaril (hydroxyzine pamoate), and Pathibamate®

(tridihexethyl chloridemeprobamate) during the year, sometimes in combinations. All of these drugs can cause confusion, disorientation, and the picture of dementia. At her age, she could have had other causes for her dementia besides medications. Whatever the cause, while on these medications it would be difficult to discover.

Depression and anxiety are also very common in the elderly. Many come in with what looks like dementia, but are really depressed. Pseudodementia is the confusing term used to describe this. Many of these patients are agitated; some are withdrawn; others are psychotic. The patient was tried on Asendin® (amoxapine), a new generation antidepressant that is felt to be antipsychotic also. It can produce excitement, mania, insomnia, and confusion. It is also an anticholinergic. Drugs that are anticholinergic may deplete acetylcholine in the brain and cause confusion. Mellaril, and antipsychotic, was tried for a time, as was Pathibamate, an anticholinergic meprobamate combination. Our patient was tried on the full gambit of psychotropic drugs, including antipsychotics, antidepressants, and anti-anxiety medications.

The patient also had gastrointestinal problems that included diarrhea and was on paregoric almost the whole year. She was also on Tagamet for five months. Bentyl, Donnatal, Donnaset, and Pathibamate were also used. These medications with their side effects could cause confusion, disorientation, even psychosis.

All of these symptoms are frequently seen in the elderly, and can cause major problems. Sleep difficulty, confusion, disorientation, agitation, depression, constipation, diarrhea, and other symptoms can be so severe that it forces older people into other living arrangements. If they are living alone, they may have to move in with one of their children. If they live with a child, they may have to move into a nursing home. These are very difficult problems, not only for the patient, but for their families.

The first thing we did was take her off all medications. This was done in the hospital where she was watched closely. Some elderly people don't eat or drink fluids very well, and this alone can cause much of their



symptomatology. Electrolyte imbalance is an important consideration here. When I first started taking patients off their medications, I felt anxious about it. I don't feel that way anymore. If the blood pressure climbs, antihypertensives can be added. If patients develop arrhythmias or failure, heart medications can be re-started. The patient did much better when taken off medications. Her confusion went away. She wasn't agitated or psychotic and her sleep improved. A lot of the problem was iatrogenic.

I do not give benzodiazepines for sleeping problems. I try to find the reasons. Many times older patients are depressed. Sometimes this presents itself as dementia with confusion, agitation, disorientation, and even psychosis. I prescribe an antidepressant for these patients, usually Sinequan 25 mg H.S. After three or four days at this dose, sleeping patterns are usually better, and patients may be much less confused and agitated. They also may be less depressed. If the patient is doing well, with few side effects, I may increase the dose to 50 mg and then even to 75 mg at night. Older patients do not need the higher antidepressant doses used in younger patients. You may find 50 or 75 mg a high enough dose for an antidepressant effect. If side effects prevent the use of an effective dose range, Ritalin® (methylphenidate) 10 mg BID can be very helpful in depressed patients.

Some elderly patients who show the signs of dementia do not respond to antidepressants. They remain confused, agitated and even psychotic. When this happens, I discontinue the antidepressants and start patients on Stelazine® (trifluoperazine) 2 mg BID. Increasing this dose slowly as needed. This drug is very helpful in patients who are demented. Low doses usually handle the problem nicely without oversedating the patient.

I wish I could say that this patient's problem was atypical. It is not. All one need do is walk through most nursing homes to find polypharmacy in the elderly. The best thing I can do for older patients is to discontinue their medications and observe them closely. This may mean hospitalization. If medications are needed, and, in many cases they are, low doses may be adequate if enough time is allowed for an effect. If one drug isn't effective, adding a second or third doesn't really help. Side effects also seem worse in the elderly. Many are similar to the symptoms that they present with. It becomes confusing when presenting symptoms and side effects look the same.

As our population becomes older, all of us are going to be called upon to treat older patients. Some of my

most rewarding experiences come from treating these patients. There is something good about seeing elderly patients enjoying life again. They deserve it.

**References** 1. Dr. Roberto Dominguez, Grand Rounds Presentation, University of Louisville, October 31, 1985. 2. Dr. Carl P. Browman, Sleep Disorders Center, Humana Hospital Audubon.

---

*Herbert Wagemaker, M.D., Department of Psychiatry and Behavioral Sciences, University of Louisville, Ambulatory Care Building, 550 S. Jackson Street, Louisville, Kentucky 40202. Robert Cade, M.D., Department of Medicine and Physiology, University of Florida, Box J-204, JHMC, Gainesville, Florida 32610.*

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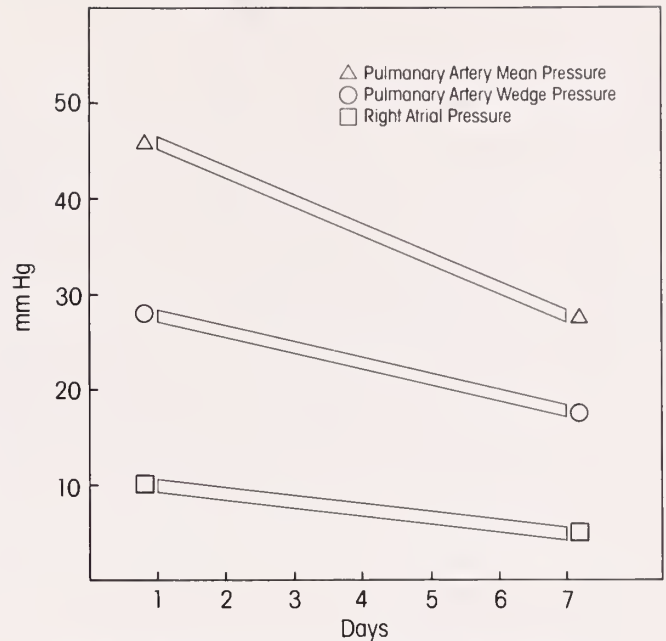
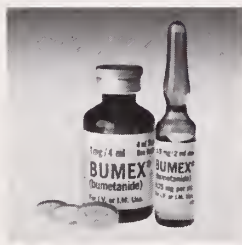
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**References:** 1. Olesen KH, *et al. Postgrad Med J* 51(Suppl 6): 54-63, 1975. 2. Handler B, Dhingra RC, Rosen KM. *J Clin Pharmacol* 21: 706-711, Nov-Dec 1981. 3. Brater DC, *et al. Clin Pharmacol Ther* 34: 207-213, Aug 1983. 4. Brater DC, Fox WR, Chennavasani P. *J Clin Pharmacol* 21: 599-603, Nov-Dec 1981. 5. Davies DL, *et al. Clin Pharmacol Ther* 15: 141-155, Feb 1974.

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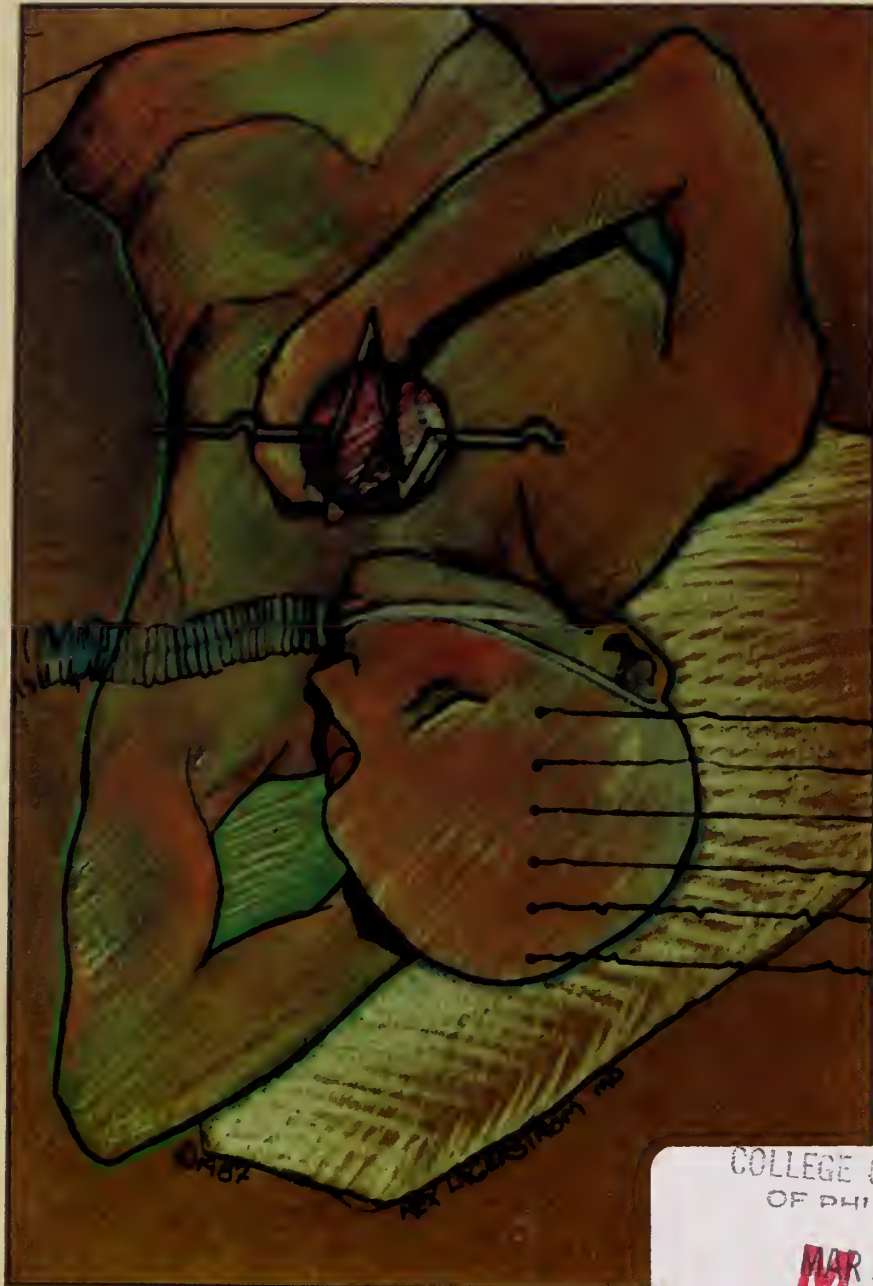
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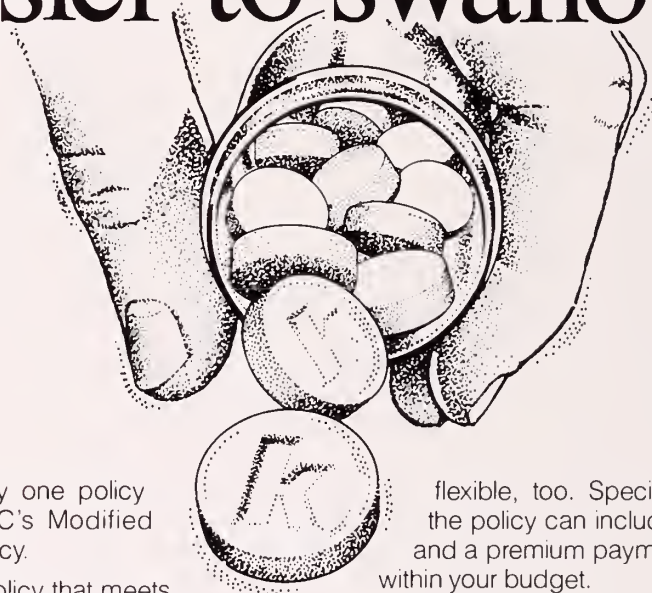


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## The one you know best keeps looking better

Please see next page for brief summary of prescribing information



# The one you know best keeps looking better

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR)

## INDERAL® LA (brand of propranolol hydrochloride) (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of Inderal has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. Inderal has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, Inderal also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in

conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

**INDICATIONS AND USAGE.** **Hypertension:** Inderal LA is indicated in the management of hypertension, it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS.** **CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior

to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOLYCEMIA.** Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case, this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS.** **General.** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**Clinical Laboratory Tests.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncope attacks, or orthostatic hypotension.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**Pregnancy.** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

**Pediatric Use.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

**Gastrointestinal:** nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** bronchospasm.

**Hematologic:** agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-Immune.** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** alopecia, LE-like reactions, psoriasis-like rashes, dry eyes, male impotence and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSEAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal tablets to Inderal LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg for mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg Inderal LA once daily.**

**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. Inderal LA National Compliance Evaluation Program. Data on file, Ayerst Laboratories.
2. Ravid M, Lang R, Jutrin I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985; 145:1321-1323.

**Ayerst**

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### Be A Joiner

**O**ur society is a society of joiners. We all belong to "groups" who have similar interests to ours. We have church groups, service clubs, professional groups and social groups. Each has a cause and draws some degree of devotion from its membership. We are particularly fond of athletic causes and devote much time and effort to the pursuit of excellence for our chosen Alma Mater. We belong to hospital staffs and give freely of our time in the interest of the group in search of excellence and the stamp of approval for our staff.

To focus on **our** organization, I am asking you to "become a joiner." This Kentucky Medical Association has your interests at heart. We exist at the pleasure of the physicians of this Commonwealth. Join the common interest of all physicians to address the problems and changes besetting the profession today. We try to address each of the many forces attempting to change medicine which are not in the interest of our patients and our profession.

Kentucky Medical Association is exerting an all-out push on the front of the liability crisis. "Joining" with other interested groups, we have formed a coalition for tort reform and legislative relief per the House of Delegates' mandate in 1986. We need your "grass roots" support to influence our legislature to grant some relief to this problem. This effort is being opposed vigorously by other equally organized groups with financial backing. Depending on the degree of devotion to our cause and the monetary

support our members give to Kentucky Medical Association, we can prevail.

As part of the Liability Plan, KMA will conduct a seminar on March 11 and 12 in Lexington. A copy of the program has been mailed to all members and we urge you to attend.

The Kentucky Medical Association Ad-Hoc Committee on Medical Malpractice has an excellent program planned with much study devoted to this by our excellent staff and other consultants. Two public relations firms have been engaged to help in this effort, combining "fortes" in public awareness and political savvy. Certainly every physician has **this** common interest and should be willing to help with his or her "dues dollars" and time.

On another front, Kentucky Medical Association is seeking to help with the solution of the indigent health care problem. There is active involvement with other groups to address this growing problem. "Join" with us in seeing your fair share of these unfortunates and feel the joy of generosity and gratitude of those served.

One of our greatest missions is to continue our role as patient advocates. Certainly, banding together gives us a stronger voice in the debates going on over the changes brought about by our ever-changing improved technology, payment systems and public laws. We have an obligation to protect our unknowing patients from "third party" interference in their health care. These problems are discussed in numerous

conferences and seminars sponsored by KMA. Be a joiner! Be informed!

Some physicians belong to **no** professional organizations. Since the advent of increasing malpractice actions, we can no longer afford the complacency of not being a member of the Kentucky Medical Association. In establishing the professional qualifications of a witness, either a defendant or expert witness, the opposing attorney **always asks**, "Doctor, in what professional organizations do you hold membership?" If "none" is the answer, can you not hear the opposing attorney asking "Doctor, do you not belong to **any** professional organization?"

Kentucky Medical Association's scientific programs are the envy of all our surrounding states. Our excellent staff has blended the state meeting with specialty group meetings to provide us with interesting scientific stimulations. Be a joiner! Come to the Annual Meeting.

Physicians are often divergent in their opinions as to the proper method of addressing problems. On these issues, though, we can all agree. Something has to be done. Be a joiner. Put your shoulder to the wheel. We have lived in the greatest time frame ever experienced in medicine's history. Be grateful to those who have served before us! Where would medicine be now were it not for those faithful "Joiners!" Join now with your talent and help make medicine what you would like it to be again.

Nelson B. Rue, Jr., M.D.



# **L ( Thirty-Second Annual Clinical Conference**

Presented by  
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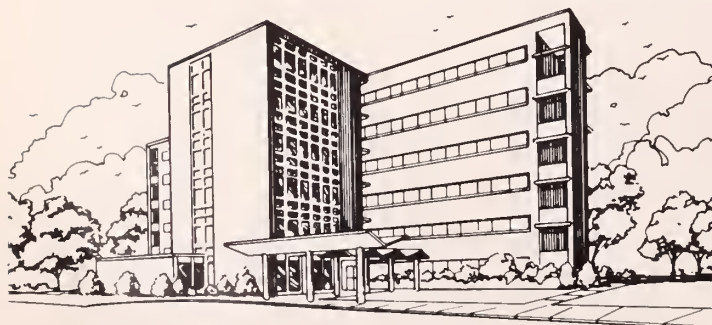
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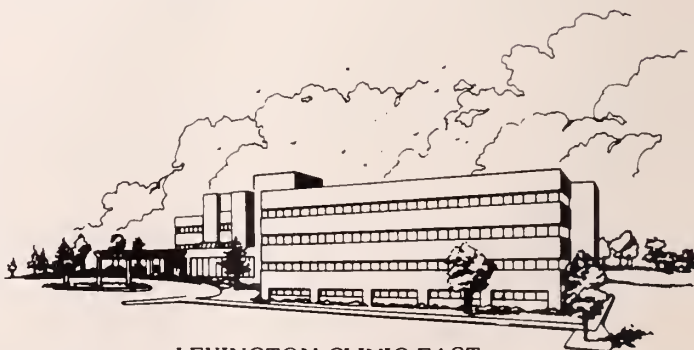
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# Kentucky Brain Death Legislation

CHRISTOPHER B. SHIELDS, M.D.

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*Brain death has become a legally acceptable definition of death in Kentucky. Any physician who certifies a patient as brain dead should follow a definite protocol to avoid potential errors. These criteria must include: profound coma, mid or large non-reactive pupils, absence of cephalic reflexes, apnea, and a flat EEG. If all these characteristics are met, a diagnosis of brain death can be reliably made.*

---

In a recent session of the legislative assembly, Kentucky became the 44th state to pass a brain death statute. That brain death should be legally recognized as being equivalent to the absolute death of a patient has been debated in the state for several years. This new law provides benefits to a patient's family and to society by limiting costs that support a "neurologically dead" patient on a respirator or cardiostimulant drugs until the inevitable cardiac arrest occurs, and by diminishing the mental anguish for family members who observe their loved ones lingering in corpse-like states. It will also provide viable perfused organs for on-going transplantation programs.

The dichotomy between brain death definition—irreversible loss of brain function—and the former legal loss of brain function—and the former legal definition—cessation of heartbeat or circulation—placed physicians in a vulnerable medical/legal position if a vital organ was removed for transplantation. In large part, this new law will protect physicians from litigation caused by organ procurement. However, potential confusion and inconsistencies may develop in the medical profession if physicians improperly assess the patient's neurological status.

Some "individual rights" groups have argued that errors have been made in the diagnosis of brain death to the detriment of the patient. These errors have revolved around the concepts of cerebral or brain death and irreversible coma (persistent vegetative state). Although premature burials were reported in the 18th and 19th centuries where evidence revealed patients were

buried alive,<sup>1</sup> these uncertainties do not occur with modern criteria.

The distinction between cerebral death and irreversible coma needs to be understood. If the brain is totally destroyed so that there is complete loss of volitional and brain reflex activity, the patient is neurologically dead. However, irreversible coma implies loss of all cerebral hemispheric function and partial or complete preservation of brainstem reflexes which are adequate for maintaining respiratory drive and blood pressure.<sup>2</sup> This often results in a persistent comatose or chronic vegetative state where the patient may not require respiratory support.

The new statute states that "death shall not be determined to have occurred unless the following minimal conditions have been met:

1. When respiration and circulation are not artificially maintained, there is an irreversible cessation of spontaneous respiration and circulation; or
2. When respiration and circulation are artificially maintained and there is a total and irreversible cessation of all brain function, including brainstem, and that such determination is made by two licensed physicians."

Such documentation is non-committal except for the basic requirements of collapse of the respiratory drive and circulation and only provides statutory recognition of the brain death concept. This leaves the physician free to select brain death criteria, regulated only by the ordinary standards of medical practice.<sup>3</sup> It is appropriate that the criteria used to diagnose brain death be a medical matter, but this does not totally protect the physician from liability. Physicians need to follow a set of criteria, as outlined here, to minimize potential legal liability.<sup>3</sup> The following must be present in a patient before a brain death diagnosis can be made.

**1. Neurological examination.** Patients with brain death are in a profound coma. There is no cerebral responsiveness to the external environment. There are no facial movements, eye opening or alterations in blood pressure and pulse to painful stimuli. The Harvard criteria<sup>4</sup> maintained that lack of limb movement to painful stimuli is mandatory for making this diagnosis. How-



ever, more recently developed criteria in Minnesota include non-purposeful response to noxious stimuli as part of the criteria of brain death. This movement is mediated through segmental spinal reflex arcs. Deep tendon reflexes of the extremities are elicited in 45% of patients who are brain dead.

2. **Pupillary signs.** A patient's pupils are usually mid-position and non-reactive to light, both directly and consensually. Widely-dilated pupils are uncommon, but mid-sized pupils usually occur as a result of loss of sympathetic (pupillodilator) and parasympathetic (pupilloconstrictor) input. If the patient seems neurologically dead but has small pupils, drug ingestion (sedatives, tranquilizers, and narcotics) must be considered. Two exceptions are glutethamide and scopolamine which cause parasympathetic paralysis or pupillary dilatation.

3. **Cephalic reflexes.** These brainstem reflexes are absent:

- a. **corneal**—blink with tactile stimulus of the corneal.
- b. **oculoauditory**—blink reflex to a loud clap.
- c. **oculocephalic**—maintaining a fixed forward position of the eyes when the head is turned rapidly to one side.
- d. **oculovestibular**—ipsilateral deviation of the eyes with cold irrigation of the external auditory canal.
- e. **gag**
- f. **snout**

4. **Apnea.** Respiratory drive originates from the caudal portion of the medulla oblongata. Because loss of neurological function occurs in a rostrocaudal direction beginning at the cortical level and progresses to the midbrain, pons and medulla, the respiratory center is usually the last to be irreversibly destroyed. Loss of respiration is the most important criterion of cerebral death.

Patients considered to be brain dead are on respiratory support which, if discontinued, will result in cardiac arrest from progressive hypoxia within seven to 10 minutes.  $PCO_2$  is frequently maintained at 20 to 25 mm/Hg while on the respirator. Under normal conditions, respiration is initiated at  $PCO_2$  of 40 mm/Hg. Cessation of respiratory support causes an increase in the  $PCO_2$  of 3.0 to 3.2 mm/Hg/min in adults<sup>5,6</sup> and 4 mm/Hg/min in children.<sup>7</sup> Five minutes of apnea results in a rise of 15 mm/Hg and reaches a level of only 35 to 40 mm/Hg. If brainstem function is compromised,

but is still viable, respiratory function may not be initiated until  $PCO_2$  reaches 50 to 60 mm/Hg. To circumvent the risk of marked hypoxemia developing prior to hypercarbia, 100%  $O_2$  should be administered for 10 minutes before discontinuing respiratory support. Humidified oxygen needs to pass over the ET tube during apnea testing. To test brainstem viability, let the  $PCO_2$  rise to 60 mm/Hg (this has been confirmed by blood gas measurements). If respiratory effort does not develop within seven to 10 minutes, the respiratory center is non-functional and the lower brainstem is dead.

5. **Electrocerebral silence.** Electroencephalography is not necessary to confirm the diagnosis of brain death<sup>8</sup> nor does a flat EEG alone authenticate this condition. The presence of all the clinical criteria (1 through 4) is never associated with recovery yet further documentation by an isoelectric EEG may be desirable for medicolegal reasons or before organ removal in a transplantation program. Although several centers require electrocerebral silence as a prerequisite for this diagnosis, this is not included in the Kentucky Brain Death Law.

If EEGs are utilized, a single flat record of 30 minutes (at gains  $<2$  uV/1 mm) is always associated with death, if all drug and hypothermia-induced comas are eliminated.<sup>9</sup> A patient who sustains a devastating cerebral insult (hypoxia, profound shock) is rarely resuscitated and remains in a permanently vegetative state with a flat EEG and intact lower brainstem functions. Such a patient is not neurologically dead. This underscores the importance of correlating **all** the clinical criteria in arriving at a correct diagnosis. Thus, the EEG should be considered an aid rather than a definitive tool.

Cerebral blood flow determination also contributes to the confirmation of brain death. Intracranial hypertension, caused by trauma, cardiac arrest, metabolic disturbance, intracranial hemorrhage, tumors, *etc.* may result in extrinsic pressure on cerebral vessels which may reach the point of occlusion. If this phenomenon lasts for 30 minutes or more, the brain is irretrievably damaged and brain death is established. Cessation of cerebral circulation has been documented by bolus transit isotope curves,<sup>10</sup> 4 vessel radiopaque and radio-nuclide angiography,<sup>2</sup> and Doppler ultrasonography in neonates.<sup>11</sup> Isotope and radiopaque angiography, although reliable and rapid, are cumbersome. A respiratory-dependent patient must be transported to the nuclear medicine or angiographic suite. These tests have found

greater applicability in Europe than in the United States. Brainstem auditory evoked potentials may be utilized to confirm brain death in the pediatric population.<sup>12</sup>

Nothing in the state law refers to the timing of the neurological assessment. Criteria existing at one point in time fulfills the fundamental requirements, however, other states require two examinations separated by 12 to 24 hours.

All signs used in determining brain death are contingent on the absence of confounding factors such as drug intoxication and hypothermia. If the cause of the coma is in doubt, a complete drug screen is performed. Barbituates are often administered therapeutically for their cerebral protectant effects if a neurological disorder exists. These drugs may remain unmetabolized for a prolonged period of time. Hence drugs, such as sedatives or narcotics which induce a coma, must be totally excreted from the patient before determining brain death. Because hypothermia can also simulate cerebral death, a patient must have a core temperature above 95° F before diagnosis of brain death is made.

By following these clinical and diagnostic guidelines, physicians and family are assured that no chance of recovery exists for the patient. Continuing respiratory support for a patient that meets all the criteria only prolongs the emotional grief and suffering of family members, needlessly increases medical costs, withholds potential donor organs for transplantation, and delays the inevitable cardiac collapse which develops in the patient within one to 14 days.

The Kentucky Legislature has passed a timely and meaningful law which will greatly facilitate the care and disposition of patients having met the criteria of cerebral death.

- References**
1. Buried alive. *Brit Med J* 2:819 (Dec. 8), 1877.
  2. An appraisal of the criteria of cerebral death: a summary statement. A collaborative study. *JAMA* 237:982-986, 1977.
  3. Rothstein PE: The citadel for the human cadaver: the Harvard brain death criteria exhumed. *Univ of Fla Law Rev* 32(2):275-307, 1980.
  4. A definition of irreversible coma: Report of the ad hoc committee of the Harvard Medical School to examine the definition of brain death. *JAMA* 205:337-340, 1968.
  5. Frumin MJ, Epstein RM, Cohen G: Apneic oxygenation in man. *Anesthesiology* 20:789-798, 1959.
  6. Eger EI, Severinghaus JW: The rate of rise of PaCO<sub>2</sub> in the apneic anaesthetized patient. *Anesthesiology* 22:419-425, 1961.
  7. Outwater KM, Rockoff MA: Apnea testing to confirm brain death in children. *Crit Care Med* 12:357-358, 1984.
  8. Goodman JM, Heck LL: Confirmation of brain death at bedside by isotope angiography. *JAMA* 238:966-968, 1977.
  9. Spudis EV, Penry JK, Link AS Jr: Paradoxical contributions of EEG during protracted dying. *Arch Neurol* 41:153-156, 1984.
  10. Korein J, Braunstein P, Kricheff I, et al.: Radioisotopic bolus technique as a test to detect circulatory deficit associated with cerebral death. 142 studies on 80 patients demonstrating the bedside use of an innocuous IV procedure as an adjunct in the diagnosis of cerebral death. *Circulation* 51:924-937, 1975.
  11. McMenamin JB, Volpe JJ: Doppler ultrasonography in the determination of neonatal brain death. *Ann Neurol* 14:302-307, 1983.
  12. Steinhart CM, Weiss IP: Use of brainstem auditory evoked potentials in pediatric brain death. *Crit Care Med* 13(7):560-562, 1985.

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# Massive Chondrosarcoma of the Hand

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AND ANN S. KASDAN, R.N.

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*Chondrosarcoma of the hand is rare, with less than 100 reported cases. A case report of the largest recorded chondrosarcoma of the hand is presented. Amputation at the mid-forearm was performed to obtain proximal margins. Follow-up during the four years since surgery has indicated no recurrence.*

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The first case was reported in 1943 by Lichtenstein and Jaffe.<sup>1</sup> In 1983, Justis & Dart found a total of 71 cases in the literature to which they added one.<sup>2</sup> In 1984, Palmieri presented 18 cases.<sup>3</sup> Thus, less than 100 cases have been reported.

## Case Report

A 56-year-old female presented with a large tumor of the left hand. The patient first noticed a "small knot" on her left index finger five years prior to the visit. Two years after the appearance of the knot, surgery was recommended by her physician. The patient refused surgery on religious grounds and sought no further treatment until convinced to do so by her minister.

Physical examination indicated a well nourished female in no acute distress. There was a massive, foul smelling tumor encompassing the proximal and middle phalanges of the left index finger. (Fig. 1) A small portion of the distal phalanx protruded from the lesion. The weight of the tumor was such that it necessitated the patient's support of the left hand with the right. The patient had sustained no antecedent trauma in the area of the tumor. She had experienced no pain from the tumor until just three weeks previous to her visit.

X-rays revealed a tumor measuring approximately 12 × 10 cm, involving the proximal and middle phalanges. The mass contained scattered calcification and lucent areas, possibly representing necrosis or abscess. (Fig. 2) Destruction of the proximal and middle pha-

langes was virtually complete. Spiculations were noted along the medial aspects of these phalanges. Lytic defects were also present within the distal phalanx. These phalanges were displaced laterally and proximally secondary to the large soft tissue mass with associated dislocation at the metacarpophalangeal joint. Periosteal proliferation was present along the medial aspect of the left second metacarpal. In addition, multiple areas of large enchondromas involving the metacarpals, proximal, and middle phalanges of the third and fifth fingers were present.

The tumor was removed by amputation of the index finger through the proximal portion of the metacarpal. The diagnosis was that of a well-differentiated chondrosarcoma with focal necrosis, inflammation, and ulceration. Microscopic examination revealed invasive tumor nodules in the subcutaneous tissue. The tumor exhibited irregular and enlarged hyperchromatic nuclei, variation in nuclear size, occasional mitoses, and binucleated cells. (Fig. 3)

Considering the pathologic evidence of malignancy and the radiographic indication of enchondromatosis, the senior author, a consulting orthopedist, and two pathologists agreed that the appropriate course of treatment was a mid-forearm amputation. The amputation was performed on June 11, 1982.

Sections from the third finger of the amputated hand revealed a very low grade chondrosarcoma which had penetrated through the cortex of the bone in one area. The tumor exhibited hyperchromatism and occasional binucleated cells. Other areas of the same tumor appeared to represent enchondroma. The fifth finger showed enchondroma with some nuclear atypia suggesting a borderline lesion.

X-rays taken during the same time period indicated enchondromatosis involving the first three digits of the patient's right hand. (Fig. 4) The patient has refused biopsy of these lesions.



Fig. 1: Massive tumor encompassing the proximal and middle phalanges of the left index finger.

Follow-up visits during the four years since surgery indicated no change in the enchondromatosis of the right hand nor metastasis to the lungs.

### Discussion

While the hand is rarely the site of chondrosarcoma, it is by far the most common location of enchondroma. Differentiation between these two lesions is notoriously difficult, particularly in the hand. Accurate initial diagnosis is crucial however, for their treatment differs significantly. While enchondroma can usually be treated successfully with curettage and grafting, chondrosarcoma can not. Furthermore, incomplete excision of chondrosarcoma in the first operative procedure results in increasingly aggressive recurrences, often making progressively radical treatment necessary.<sup>4</sup>

Chondrosarcoma of the hand usually occurs late in life. In separate studies by Palmieri<sup>3</sup> and Roberts & Price,<sup>5</sup> the average age at diagnosis was 69 and 67 respectively. Conversely, enchondroma usually occurs much earlier, specifically in the 20 to 30 year age group.<sup>6</sup>

Enchondroma of the hand are characteristically small, measuring less than several centimeters in diameter.<sup>7</sup> In contrast, the size of chondrosarcoma varies widely. Roentgenographic measurements indicated the lesion in this case to be 12 × 10 cm. This is believed to be the largest chondrosarcoma of the hand reported. Roberts & Price reported one patient with a chondrosarcoma measuring 10 × 9 cm who later had an "immense" recurrence.<sup>5</sup> The measurements of the recurrent lesion were not given.

Swelling is the most consistent presenting symptom of chondrosarcoma.<sup>3,5,7,8</sup> Pain is not always present but

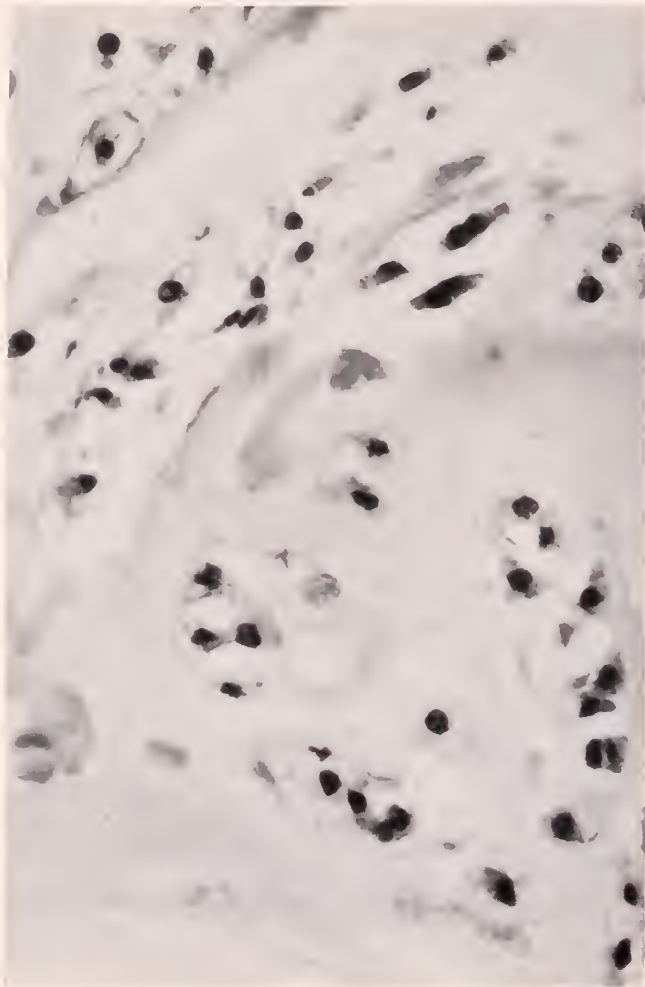


Fig. 2: Radiograph of the left hand showing tumor measuring approximately 12 × 10 cm. Note the multiple enchondromas in the other digits.

is common. Contrary to this, notable swelling is rarely found in enchondroma and pain is not experienced in most cases. In Shellito & Dockerty's study of enchondroma of the hand, only eight of 30 cases elicited pain and all of these were associated with pathologic fractures.<sup>6</sup> Considering the size of the tumor in this case, it is surprising that no pain was experienced until three weeks prior to the visit. Coley & Higinbotham stated that the appearance of pain in a previously painless lesion signated the transformation of an enchondroma to a chondrosarcoma.<sup>9</sup>

The most common location of both chondrosarcoma and enchondroma of the hand is at the metacarpophalangeal joint, most often in the proximal phalanx.<sup>3,5</sup> Roberts & Price's study indicated that these chondrosarcoma originate endosteally near the location of the former epiphyseal growth plate, *i.e.*, distally in the metacarpal and proximally in the phalanx.<sup>5</sup> Palmieri's study also determined that most of these chondrosarcoma originate centrally.<sup>3</sup> Due to the extensive destruction





**Fig. 3:** Well differentiated chondrosarcoma. Note the irregular and enlarged hyperchromatic nucleii, variation in nuclear size, mitoses, and binucleated cells. (H&E; X400)

by the lesion in this case, one can only surmise the exact origin of the tumor, but the proximal phalanx was undoubtedly involved.

The pathologic origin of chondrosarcoma of the hand is highly debated. It has been postulated that chondromas arise from residual islets of fetal cartilage cells that were captured in the cortex of a lengthening endochondral bone. Later, some unknown event could then stimulate these chondroma into rapid growth and malignant transformation to a chondrosarcoma. Roberts & Price endorsed the residual islet theory after noting X-rays showing "tiny bone defects—probably cartilaginous" in the metaphysis that later films showed to have grown into eccentric, but typical chondromas.<sup>5</sup> They cited this observation and the high incidence of both malignant and benign cartilaginous tumors at the growth



**Fig. 4:** Radiograph of right hand. Note the multiple enchondroma involving the first three digits.

ends of the bone as evidence to support the theory of chondrosarcoma arising from chondroma.

Other reports supporting the opinion that chondrosarcoma of the hand can originate from chondroma include those of Coley & Higinbotham,<sup>9</sup> Sbarbaro & Straub,<sup>10</sup> Barnes & Cato,<sup>11</sup> Culver et al.<sup>12</sup> Block & Burton,<sup>13</sup> Justis & Dart,<sup>2</sup> and Palmieri.<sup>3</sup> Block & Burton cited X-rays of lobulated tumors expanding but not penetrating the cortex that subsequently had broken thru the cortex as evidence of malignant transformation. Culver et al cited section showing an enchondroma within the periosteal cavity of a phalanx with moderately differentiated chondrosarcoma arising just adjacent to it and chondrosarcoma of more myxomatous character beyond that as evidence.

Palmieri considered the origination of chondrosarcoma from solitary and multiple enchondromas sepa-

ately, a distinction that has been made often.<sup>1,9,13</sup> He found chondrosarcoma "arising in a previous enchondroma" in four patients with multiple enchondroma, and none in patients with a solitary enchondroma.<sup>3</sup>

The debate over the origination of chondrosarcoma is obscured by the difficulty in differentiating it from enchondroma microscopically. The difficulty is demonstrated by at least five reported cases in which the validity of an initial diagnosis of enchondroma was suspect after recurrence of the lesion and review of the case history.<sup>13,14,15,16,17</sup> In a study by Lansche and Spjut, the initial diagnosis was refuted after review of deeper sections from the original specimen.<sup>14</sup> The differentiation is particularly difficult in the hand due to the atypical cellularity of enchondroma in the hand. Dahlin warns that generous biopsy material is necessary and accurate microscopic diagnosis depends upon interpretation of subtle qualities and characteristics. He suggests that insufficient sampling has led to misinterpretation of chondrosarcoma for enchondroma, "underdiagnosis and the erroneous impression that malignant transformation has caused the subsequent recurrence."<sup>7</sup> Due to the difficulties in differentiating the two lesions microscopically, the use of X-rays as a key diagnostic tool has been stressed.<sup>7,18,19</sup>

The potential consequences of underdiagnosis are the previously mentioned increasingly aggressive recurrences and metastasis. There have been eight reported cases of metastasis from chondrosarcoma in the hand, six of these occurring in the lung.<sup>2,20,21,22</sup>

Thus, despite the skepticism of some, the possibility that chondrosarcoma of the hand arises from enchondroma justifies that patients with enchondromas, especially those with enchondromatosis, be followed closely for evidence of malignancy. The difficulty in differentiating the two reinforces the need for this precaution. If a diagnosis of chondrosarcoma is made, ray resection is advised.<sup>2,3,13,16,23</sup> Excision of chondrosarcoma of the bones of the hand is deemed an unacceptable treatment.<sup>2,5,13,23</sup> Regular pulmonary X-rays are recommended as follow-up for early detection of possible metastasis.

### Summary

Chondrosarcoma of the hand is rare. Less than 100 cases have been reported. A case report of the largest recorded chondrosarcoma of the hand is presented. Differences in enchondroma and chondrosarcoma are discussed. Views on the theory of malignant degeneration of chondroma to chondrosarcoma are included.

- References** 1. Lichtenstein L, Jaffe HL: Chondrosarcoma of bone. *Am J Path* 19:553-574, 1943. 2. Justis EJ, Jr, Dart RC: Chondrosarcoma of the hand with metastasis: A review of the literature and case report. *J Hand Surg* 8:320-324, 1983. 3. Palmieri TJ: Chondrosarcoma of the hand. *J Hand Surg* 9A:332-338, 1984. 4. Henderson ED, Dahlin DC: Chondrosarcoma of bone: A study of 288 cases. *J Bone Joint Surg* 45-A:1450-1458, 1963. 5. Roberts PH, Price CH: Chondrosarcoma of the bones of the hand. *J Bone Joint Surg [BR]* 59-B:213-221, 1977. 6. Shellito JG, Dockerty MB: Cartilaginous tumors of the hand. *Surg Gynecol Obstet* 86:465-472, 1948. 7. Dahlin DC: Bone Tumors. General Aspects and Data on 6221 Cases. 3rd Ed., Springfield, Ill., Charles C. Thomas, 1978. 8. Morton JJ, Mider GB: Chondrosarcoma. *Ann Surg* 126:895-931, 1947. 9. Coley BL, Higinbotham NL: Secondary Chondrosarcoma. *Ann Surg* 139:547-557, 1954. 10. Sbarbaro JL, Jr, Straub LR: Chondrosarcoma in a phalanx: Report of a case. *Am J Surg* 100:751-752, 1960. 11. Barnes R, Catto M: Chondrosarcoma of bone. *J Bone Joint Surg* 48-B:729-764, 1966. 12. Culver JE, Jr, Sweet DE, McCue FC: Chondrosarcoma of the hand arising for a pre-existent benign solitary enchondroma. *Clin Orthop* 113:128-131, 1975. 13. Block RS, Burton RI: Multiple chondrosarcomas in a hand: A case report. *J Hand Surg* 2:310-313, 1977. 14. Lansche WE, Spjut HJ: Chondrosarcoma of the small bones of the hands. *J Bone Joint Surg* 40-A:1139-1145, 1958. 15. Jokl P, Albright JA, Goodman AH: Juxtacortical chondrosarcoma of the hand. *J Bone Joint Surg* 53-A:1370-1376, 1971. 16. Patel MR, Pearlman HS, Engler J, Wollowick BS: Chondrosarcoma of the proximal phalanx of the finger. *J Bone Joint Surg* 59-A:401-403, 1977. 17. Trias A, Basora J, Sanchez G, Madarnas P: Chondrosarcoma of the hand. *Clin Orthop* 134:297-301, 1978. 18. Jakobson E, Spjut HL: Chondrosarcoma of the bones of the hand. Report of three cases. *Acta Radiol* 54:426-432, 1960. 19. Dahlin DC, Salvador AH: Chondrosarcoma of the bones of the hands and feet: A study of 30 cases. *Cancer* 34:755-760, 1974. 20. Cruickshank AH: Chondrosarcoma of a phalanx with cutaneous metastases. *J Path and Bact* 57:144-145, 1945. 21. Gottschalk RG, Smith RT: Chondrosarcoma of the hand: Report of a case with radioactive sulphur studies and review of the literature. *J Bone Joint Surg* 45A:141-150, 1963. 22. Wu KK, Collon DJ, Guise ER: Extra-osseous chondrosarcoma. *J Bone Joint Surg* 62-A:189-194, 1980. 23. Habal MB, Snyder HH, Murray JE: Chondrosarcoma of the hand. *Am J Surg* 125:775-776, 1973.

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# Carcinoid Tumors of the Lung

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*Carcinoid tumors of the lung account for 1-2% of primary pulmonary malignancies. Controversy regarding radical versus limited surgical resections stems, in part, from the lack of a classification system to delineate the spectrum of virulence among carcinoid tumors. We have reviewed our experience with carcinoid tumors of the lung and noted 31% of patients to have aggressive disease. Although conservative surgery has been advocated, standard pulmonary resection appears to be preferred treatment. Tumor histology is the most important prognostic factor. A classification of neuroendocrine neoplasms of the lung should be utilized in some form. At present, a selective surgical approach to bronchial carcinoid tumors based on location, size and histology will provide optimal results.*

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Pulmonary neoplasms are the leading cause of cancer deaths in the United States today. There will be an estimated 125,000 lung cancer deaths this year alone,<sup>1</sup> and this figure continues to rise annually despite identification of unequivocal risk factors. The five-year survival rate remains low, and most patients present with unresectable disease. In contrast, carcinoid tumors of the lung have a favorable prognosis. These tumors comprise 0.8-2.8%<sup>2-5</sup> of all malignancies in the lower respiratory system.

Our experience with carcinoid tumors of the lung over a 15-year period is reviewed, and those patients with aggressive disease presented in a tabular format. Overall, the five-year survival rate is four to six times better than that of other pulmonary neoplasms. However, there is continuing debate over the extent of surgical resection necessary for this disease. Individual prognosis is dependent upon the virulence of the tumor. Further efforts to define the aggressive variants of this disease and a change in nomenclature to delineate the more malignant tumors will allow comparison of similar groups and should lead to a more logical decision involving the extent of resection.

## Patients and Methods

We reviewed the charts of all patients with bronchial carcinoid tumor seen in two of our affiliated hospitals over the period 1969-1984. These 13 patients accounted for approximately 0.6% of all patients with primary pulmonary neoplasms. Patients ages ranged from 19 to 88 years with a mean of 56. Cough, hemoptysis, and persistent pneumonia were the most common presentations. Bronchoscopy, with biopsy was the main diagnostic tool with diagnosis confirmed in 70% of cases with central lesions. Bronchial washings were uniformly nondiagnostic. Women comprised 77% of patients.

Eleven of 13 patients underwent thoracotomy and either lobectomy or pneumonectomy. There were two postoperative deaths, one of respiratory failure following completion of pneumonectomy for failure to ventilate the remaining lobe after sleeve lobectomy. A postoperative myocardial infarction accounted for the other death. Aggressive disease was present in 31% of cases (Table I).

## Discussion

Bronchial carcinoid tumors arise from Kulchitzky cells, which are present throughout the derivatives of the embryological endoderm including the lung.<sup>6</sup> These cells can metabolize amines to bioactive molecules and show ultrastructural and cytochemical features common to the diffuse neuroendocrine (APUD) cell system well described by Pearse.<sup>7</sup> Bensch<sup>8</sup> was the first to suggest that bronchial carcinoid tumors and small cell undifferentiated carcinoma were of similar origin. Recent work by Gould<sup>9</sup> and DeCaro<sup>10</sup> has improved our understanding of the spectrum of malignancy, which may originate from the Kulchitzky cell.

Bronchial carcinoid tumors may account for up to 2.8% of primary pulmonary neoplasms.<sup>4</sup> Recurrent pneumonia, cough, wheezing or hemoptysis are typical presenting symptoms, although up to 40% of patients may be asymptomatic.<sup>11</sup> Twenty-three percent of patients in our series had no symptoms referable to their tumor. Carcinoid syndrome is a rare presentation and implies advanced disease.<sup>12</sup>

TABLE I.  
AGGRESSIVE DISEASE

Patient	Age	Sex	Symptom	Diagnosis	Lobectomy	Comment
1	39	F	Recurrent pneumonia	Bronchoscopy with biopsy	Lobectomy	Two lymph node metastases, alive 3 years postoperatively
2	70	M	Shortness of breath, hemoptysis	Bronchoscopy with biopsy	Lobectomy  Bronchoscopic resection	Martin 2 cm. All nodes negative.  Tracheal recurrence 9 years postoperatively. Bronchial stump recurrence 10 years postoperatively. Alive 12 years postoperatively (Fig. 1)
3	78	M	Cough, Hemoptysis	Bronchoscopy	Pneumonectomy	Bone and liver metastasis 5 years postoperatively. Alive 7 years postoperatively.
4	65	M	Back pain	Autopsy	None	Died of GI hemorrhage 36 hours postadmission. Disseminated metastases at autopsy

Bronchoscopy is the most important diagnostic tool with the majority of tumors accessible with the flexible bronchoscope.<sup>5,11,13</sup> The diagnosis can be confirmed by biopsy.<sup>14,15</sup> Isolated cases of massive hemorrhage resulting in death<sup>16</sup> or requiring thoracotomy<sup>17</sup> have been reported. Nonetheless, this procedure is warranted if the results will alter the extent of resection. Cytological techniques are not useful in evaluating suspected bronchial carcinoid tumors. These methods rarely provide a definite diagnosis and may result in an erroneous diagnosis.<sup>18-20</sup> Our experience corroborates the utility of bronchoscopy and the futility of cytological methods in establishing the diagnosis of bronchial carcinoid tumors.

Distinguishing carcinoid tumors from small cell undifferentiated carcinoma is not an unusual problem. Kron<sup>21</sup> reviewed 323 consecutive patients with an initial diagnosis of undifferentiated pulmonary malignancy. Among the 18 patients with localized disease, 15 had their tumors reclassified as atypical carcinoid tumors. The diagnostic method and pathological specimens should be reviewed in the infrequent patient with stage I undifferentiated carcinoma.

While surgical resection is optimal therapy for carcinoid tumors, the extent of operation for cure remains controversial. An extreme example of the polarity of opinion among experts regarding the extent of operation necessary was noted in 1945 when Jackson<sup>22</sup> advocated bronchoscopic resection as primary therapy, while Graham<sup>23</sup> encouraged radical surgical removal, preferably pneumonectomy, as the procedure of choice.

Thomas<sup>24</sup> reported successful treatment of carcinoid tumors with local resection and bronchial anastomosis in 1954, yet standard pulmonary resection without attempts to conserve pulmonary parenchyma was common practice through 1970 as noted by Boyd.<sup>25</sup> Over the ensuing decade, several reports appeared describing limited resection. Jensik<sup>26</sup> reported 86% five-year survival in 33 patients, 70% of whom had undergone less than lobectomy. Cooper<sup>27</sup> described a small series with no recurrences utilizing bronchotomy and local resection as often as lobectomy. Okike<sup>28</sup> reported in detail about a small subgroup of patients undergoing bronchoplastic procedures with no deaths or recurrence. Todd<sup>29</sup> reported 10 patients all free of disease greater than five years after sleeve resection and encouraged a conservative approach to bronchial carcinoid tumors.

Conversely, Aberg<sup>30</sup> reviewed several published series and identified patients with sufficient information concerning the type of operation and length of follow-up. He concluded that lobectomy and pneumonectomy offered a distinctive survival advantage over conservative resections and supported a radical approach to bronchial carcinoid tumors. In a review of 124 cases from a single institution, McCaughan<sup>14</sup> stressed the need for conventional pulmonary resection and systematic mediastinal node dissection.

The benefits of limited surgery versus radical resection are difficult to evaluate due to a relatively small number of cases and the present lack of a standardized nomenclature to distinguish the typical indolent carcinoid tumor from the malignant atypical variants. Ob-



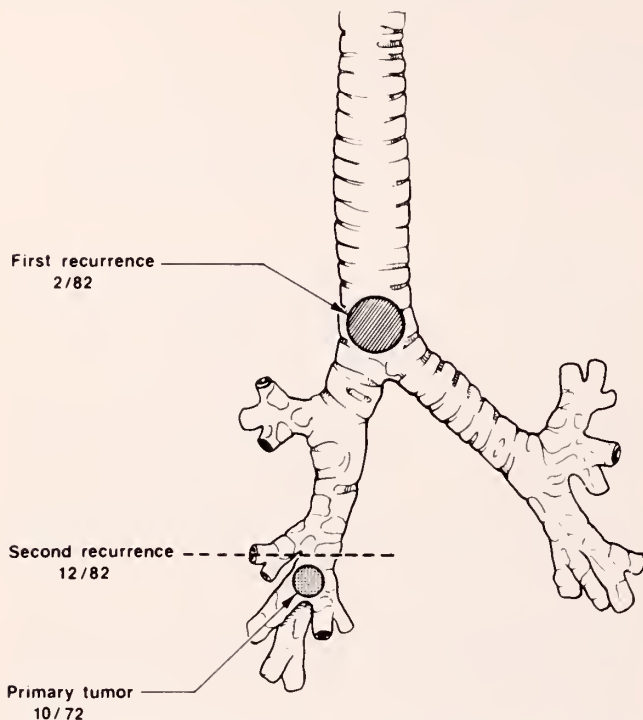


Fig. 1: Graphic illustration of patient #2 with late and persistent local disease.

viously, one cannot compare therapy for the same disease between the series of patients reported by O'Grady<sup>31</sup> with no metastases at presentation and 95% five-year survival to those patients reported by Burchart<sup>32</sup> with a 56% five-year survival, 27% of whom presented with metastatic disease.

The histology of carcinoid tumors has a definite influence on prognosis. Arrigoni<sup>33</sup> was the first to describe the implications of atypical histology, which was present in 11.4% of cases at the Mayo Clinic. Those patients whose tumors demonstrated pleomorphism, irregular nuclei, hyperchromatism, focal necrosis or increased mitotic activity had a 70% incidence of metastatic disease at presentation and 30% were dead within two years. McCaughan<sup>14</sup> noted a 48% incidence of metastasis in patients with atypical lesions. Mills<sup>31</sup> reported metastasis present in 41% of patients with atypical carcinoid tumors and a two-year survival rate of only 53%. Among Lawson's<sup>20</sup> eight patients with atypical or metastasizing carcinoid tumors, 50% were dead within 10 years of diagnosis.

Carcinoid tumors with typical histology have an entirely different prognosis. Among 203 patients with typical histology from the Mayo Clinic,<sup>15</sup> the five-year

survival rate was 94%. Lawson<sup>20</sup> noted only one tumor death among 59 patients with typical carcinoid tumors. Paladugu<sup>35</sup> noted only two tumor deaths among 115 patients with lesions corresponding to typical carcinoid tumors.

Late local recurrence several years after apparently adequate resection of typical carcinoid tumors has been reported<sup>36</sup> and is exemplified by our patient #2. This patient underwent bronchoscopic resection of a tracheal carcinoid tumor nine years after lobectomy. Whether the tracheal tumor represents a new primary with early recurrence at the bronchial stump is uncertain. Lawson<sup>20</sup> has reported a patient with multiple atypical carcinoid tumors of the trachea nine years after lobectomy. Grillo<sup>37</sup> has reported a recurrence at the carina 10 years after sleeve resections of the right mainstem bronchus. Primary tracheal carcinoid tumors are very rare with only 14 reported as of 1978.<sup>38</sup> Histologically, the primary lesion, tracheal tumor and bronchial stump recurrence are nearly identical typical carcinoid tumors (Fig. 1).

Recently two reports published by separate groups have described methods to define and categorize the spectrum of malignancy among bronchial carcinoid tumors. Warren and Gould<sup>39</sup> have proposed a nomenclature for neuroendocrine pulmonary tumors based on histology, electron microscopy and immunohistochemical staining for various amine products. Paladugu and Bonfield<sup>35</sup> have suggested a new nomenclature for carcinoid tumors where biological virulence is predicted from the histology and quantitative DNA analysis. Should either method prove applicable on a widespread basis, it could allow a more logical basis for extent of resection necessary and a more accurate comparison of results. Additionally, patients with poor prognosis could be considered for adjuvant therapy.

We advocate a selective surgical approach to bronchial carcinoid tumors. The extent of operation based upon histology, tumor size and anatomic location will provide local control without needless parenchymal resection. Lobectomy is the procedure of choice for tumors beyond the mainstem bronchi. Pneumonectomy is indicated for most central tumors with local extension. Bronchoplastic procedures have a definite role in selected patients with small, central, typical carcinoid tumors. Conservative techniques should also be utilized in those patients where limited resection will provide the same margin as pneumonectomy and in these individuals without sufficient pulmonary reserve to tolerate pneumonectomy.

## Summary

Carcinoid tumors are rare though favorable lesions among pulmonary malignancies. Currently, there is debate over the extent of surgical resection necessary for this disease, which stems, in part, from the present lack of an adequate classification of the spectrum of malignancy that carcinoid tumors represent.

We reviewed our experience with bronchial carcinoid tumors and found 31% of patients to have aggressive disease. This includes one patient with an unusual late tracheal recurrence.

Bronchial carcinoid tumors and small cell undifferentiated carcinoma represent the extremes of neoplasia, which arise from the pulmonary component of the APUD cell system. Carcinoid tumors may account for up to 2.8% of primary pulmonary malignancies. Bronchoscopy with biopsy is the main diagnostic tool.

Although limited resection has been advocated, standard pulmonary resection seems to be the preferred treatment.

Tumor histology is the most important prognostic criteria. Atypical carcinoid tumors are an aggressive variant of a generally indolent malignancy.

Recent publications supporting a classification of the entire range of malignant lesions arising from the bronchial neuroendocrine cells are encouraging. This would allow accurate comparison of results and possibly aid in predicting the extent of resection necessary for local control.

A selective approach to bronchial carcinoid tumors should yield optimal results. Bronchoplastic procedures and limited resection are indicated in selected patients; lobectomy remains the procedure of choice.

**References** 1. Silverberg E: Cancer statistics, 1985. *Cancer* 35:19–56, 1985. 2. Turnbull A, Huvos A, Goodner J, Beattie E: The malignant potential of bronchial adenoma. *Ann Thorac Surg* 14:453–464, 1972. 3. Attar S, Miller J, Hankins J, McLaughlin J: Bronchial adenoma — benign or malignant? *Southern Medical Journal* 71:919–922, 1978. 4. Blondal T, Grimelius L, Nou E, Wilander E, Aberg T: Argrophil carcinoid tumors of the lung. *Chest* 78:840–844, 1980. 5. Koikkalainen K, Keskitale E, Luosto R, Taskinen E: Carcinoid tumors and cylindromas of the tracheobronchial tree. *Acta Chir Gynaecol* 63:332–341, 1974. 6. Bensch K, Gordon G, Miller L: Studies on the bronchial counterpart of the Kulchitzky (argentaffin) cell and innervation of the bronchial glands. *J Ultrastruct Res* 12:668–686, 1965. 7. Pearse A: The diffuse neuroendocrine system: An extension of the APUD concept. *Co-transmission: proceedings of a symposium held at Oxford — the 50th Anniversary Meeting of the British Pharmacological Society*. MacMillan, New York, 1982, pp 223–233. 8. Bensch K, Corrin B, Pariente R, Spencer H: Oat cell carcinoma of the lung: Its origin and relationship to bronchial carcinoid. *Cancer* 22:1163–1172, 1968. 9. Gould V, Linnoila R, Memoli V, Warren W: Neuroendocrine cells

and neuroendocrine neoplasms of the lung. *Pathology Annual* 1:287–329, 1983. 10. DeCaro L, Paladugu R, Benfield J, Lovisatti L, Pak H, Teplitz R: Typical and atypical carcinoids within the pulmonary APUD tumor spectrum. *J Thorac Cardiovasc Surg* 86:528–536, 1983. 11. Salyer D, Salyer W, Eggleston J: Bronchial carcinoid tumors. *Cancer* 36:1522–1537, 1975. 12. Ricci C, Patrassi N, Massa R, Mineo C, Valentini F: Carcinoid syndrome in bronchial adenoma. *Am J Surg* 126:671–677, 1973. 13. Markel S, Abell M, Haight C, French A: Neoplasms of the bronchus commonly designated as adenomas. *Cancer* 17:590–608, 1964. 14. McCaughan B, Martini N, Bains M: Bronchial carcinoids. *J Thorac Cardiovasc Surg* 89:8–17, 1985. 15. Okike N, Bernatz P, Woolner L: Carcinoid tumors of the lung. *Ann Thorac Surg* 22:270–278, 1976. 16. Wilkins E, Darling R, Soutter L, Sniffen R: A continuing survey of adenomas of the trachea and bronchus in a general hospital. *J Thorac Cardiovasc Surg* 46:279–291, 1963. 17. Mark J: Discussion. *J Thorac Cardiovasc Surg* 79:532–536, 1980. 18. Kyriakos M, Rockoff S: Brush biopsy of bronchial carcinoid — a source of cytological error. *Acta Cytologica* 16:261–268, 1972. 19. Wilson R: An unusual second primary tumor. *Acta Cytologica* 22:362–365, 1978. 20. Lawson R, Ramanathan L, Hurley G, Hinson K, Lennox S: Bronchial adenoma: review of an 18-year experience at the Brompton Hospital. *Thorax* 31:245–253, 1976. 21. Kron I, Harman P, Mills S, Walker A, Cooper P, Minor G, Nolon S: A reappraisal of limited stage undifferentiated carcinoma of the lung. *J Thorac Cardiovasc Surg* 84:734–737, 1982. 22. Jackson C, Konzelmann F, Norris C: Bronchial adenoma. *J Thorac Surg* 14:98–105, 1945. 23. Graham E, Womack N: The problem of so-called bronchial adenoma. *J Thorac Surg* 14:106–119, 1945. 24. Thomas C: Benign tumors of the lung. *Lancet* 1:1–7, 1954. 25. Boyd A, Spencer F, Lind A: Why has bronchial resection and anastomosis been reported infrequently for treatment of bronchial adenoma? *J Thorac Cardiovasc Surg* 59:359–365, 1970. 26. Jensik R, Faber L, Brown L, Kittle C: Bronchoplastic and conservative resectional procedures for bronchial adenoma. *J Thorac Cardiovasc Surg* 68:556–567, 1974. 27. Cooper D, Belcher J: Conservative surgery for bronchial adenomata. *Thorax* 31:44–48, 1976. 28. Okike N, Bernatz P, Payne W, Woolner L, Leonard P: Bronchoplastic procedures in the treatment of carcinoid tumors of the tracheobronchial tree. *J Thorac Cardiovasc Surg* 76:281–291, 1978. 29. Todd T, Cooper J, Weissberg D, Delarue N, Pearson F: Bronchial carcinoid tumors: twenty years experience. *J Thorac Cardiovasc Surg* 79:532–539, 1980. 30. Aberg T, Blondal T, Nou E, Malmaeus J: The choice of operation for bronchial carcinoids. *Ann Thorac Surg* 32:19–22, 1981. 31. O'Grady W, McDivitt R, Holman C, Moore S: Bronchial adenomas. *Arch Surg* 101:558–561, 1970. 32. Burchart F, Axelsson C: Bronchial adenomas. *Thorax* 27:442–449, 1972. 33. Arigoni M, Woolner L, Bernatz D: Atypical carcinoid tumors of the lung. *J Thorac Cardiovasc Surg* 64:413–421, 1972. 34. Mills S, Walker A, Cooper P, Kvon I: Atypical carcinoid tumor of the lung. *Am J Surg Path* 6:643–654, 1982. 35. Paladugu R, Benfield J, Pak H, Ross R, Toplitz R: Bronchopulmonary Kulchitzky cell carcinoma. *Cancer* 55:1303–1311, 1985. 36. Kirschner P: Discussion. *Ann Thorac Surg* 22:270–278, 1976. 37. Grillo H: Carinal reconstruction. *Ann Thorac Surg* 32: 356–373, 1982. 38. Briselli M, Mark G, Grillo H: Tracheal carcinoids. *Cancer* 42:2870–2879, 1978. 39. Warren W, Gould V, Faber L, Kittle C, Memoli V: Neuroendocrine neoplasms of the bronchopulmonary tract. *J Thorac Cardiovasc Surg* 89:819–825, 1985.

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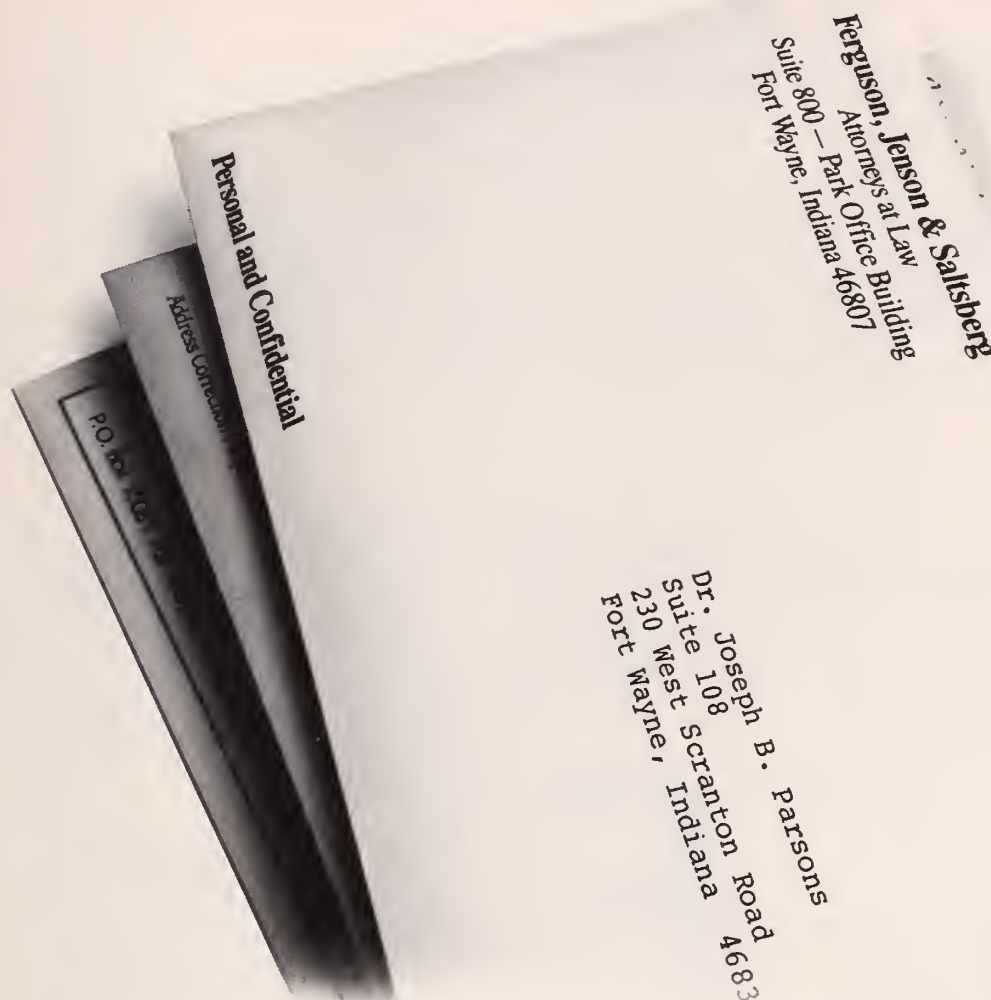
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	cimetidine 400 mg h.s.	23%	34%	43%	66
UK, Ireland, Australia <sup>2</sup>	ranitidine 150 mg h.s.	8%‡	14%‡	23%‡	243
	cimetidine 400 mg h.s.	21%	34%	37%	241

\*p=0.02

†p=0.01

‡p≤0.004

%=life-table estimates

All patients were permitted prn antacids for relief of pain.

These two trials used the currently recommended dosing regimen of cimetidine (400 mg h.s.) and ranitidine (150 mg h.s.). A comparison of other dosing regimens has not been studied.

The studied dosing regimens are not equivalent with respect to the degree and duration of acid suppression or suppression of nocturnal acid.

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1. Silvis SE, Griffin J, Hardin R, et al: Final report on the United States multicenter trial comparing ranitidine to cimetidine as maintenance therapy following healing of duodenal ulcer. *J Clin Gastroenterol* 1985;7(6):482-487.
2. Gough KR, Korman MG, Bardhan KD, et al: Ranitidine and cimetidine in prevention of duodenal ulcer relapse: A double-blind, randomised, multicentre, comparative trial. *Lancet* 1984;ii:659-662.
3. Data available on request, Glaxo Inc.

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The following is a brief summary only. Before prescribing, see complete prescribing information in ZANTAC<sup>®</sup> product labeling.

#### INDICATIONS AND USAGE:

- ZANTAC<sup>®</sup> is indicated in:
1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
  2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
  3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
  4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
  5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy and is maintained throughout a six-week course of therapy.

In active duodenal ulcer, active, benign gastric ulcer, hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

**CONTRAINDICATIONS:** ZANTAC<sup>®</sup> is contraindicated for patients known to have hypersensitivity to the drug.

**PRECAUTIONS:** Symptomatic response to ZANTAC<sup>®</sup> therapy does not preclude the presence of gastric malignancy.

Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see **DOSE AND ADMINISTRATION**). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

False-positive tests for urine protein with Multistix<sup>®</sup> may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Although recommended doses of ZANTAC do not inhibit the action of cytochrome P-450 enzymes in the liver, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Lack of experience to date precludes recommending ZANTAC for use in children or pregnant patients. Since ZANTAC is secreted in human milk, caution should be exercised when administered to a nursing mother.

**ADVERSE REACTIONS:** Headache, sometimes severe, seems to be related to ZANTAC<sup>®</sup> administration. Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain have been reported. There have been rare reports of malaise, dizziness, somnolence, insomnia, vertigo, tachycardia, bradycardia, premature ventricular beats, and arthralgias. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

In normal volunteers, SGPT values were increased to at least

twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

There have been rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Although controlled studies have shown no antiandrogenic activity, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Incidents of rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia, have been reported, as well as rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

**OVERDOSEAGE:** Information concerning possible overdose and its treatment appears in the full prescribing information.

**DOSE AND ADMINISTRATION Active Duodenal Ulcer:** The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

**Maintenance Therapy:** The current recommended adult oral dosage is 150 mg at bedtime.

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**GERD:** The current recommended adult oral dosage is 150 mg twice a day.

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### **Clinical Genetics Handbook National Genetics Foundation Inc. Ruth Y. Gerini, Eva Kahn**

**Medical Economics Books Oradell, New Jersey 07649**

Primary care physicians are the proposed audience for this handbook. Their long-term relationships with patients and their families may enable them to see patterns, to pick the genetic link, and to intercede with counseling. In fact much emphasis in the introduction is placed on preparing the family physician for his role in this process.

Forty-nine sections contain the corpus of this handbook. Each chapter has an introduction with an overview, salient features and estimates of incidence or prevalence. Mechanisms for the expression and possible pathogenesis are briefly discussed. Next the mode of inheritance with risk figures and tables illustrates how one can expect to predict the problem. Diagnosis with appropriate procedures, onset, course, and prognosis are presented as well as a short discussion of management including the psychosocial aspects. Finally appropriate background literature is listed.

Each section is reminiscent of an outline, with the insertion of material in the proper location. No claim is made that this handbook is a basic genetics text or that it will catalogue all the known genetic disorders. Rather this handbook is an overview, picking the more prevalent, or the more well known disorders, leaving the obscure for the geneticist.

Several of the contributors and the editors are "genetic counselors" from the National Genetics Foundation. Much effort has been placed in achieving rapport with the family physician and nominating them for the role as both counselor and future referral source.

Using this book as reference will not be totally satisfactory. Sketchy discussion of complicated disorder would make the user merely a witness to the diagnosis and on the negative side not able to discuss appropriate differential diagnosis. Although part of the stated purpose of the book is to make the family physician a genetic counselor, no practical information, guidelines or instructions are forthcoming. To have this book is to have a partial list of genetic disorders with minimal information.

However, if you have no genetics book and wish a small list of disorders with explanations, this handbook would be satisfactory. To learn the art of genetic counselling is to have a substantial amount of information at one's finger tips and then apply this material in the clinical setting.

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should be able to stand alone and not merely duplicate the conclusions.

References should be cited consecutively in the text and should contain, in order, the author, title of article, source, volume, inclusive page numbers, year. Journal abbreviations should conform to the Index Medicus. The Journal of KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material is reviewed by the Board of Editors and publication of any article is not to be deemed an endorsement of the views expressed therein. The editors may use up to six different illustrations with the essayist bearing the cost of all over three one-column halftones. Arrangements for reprints of an article are made with the printer and order forms are sent to all authors at the time of publication. When revisions and alterations not on the original copy are made by the authors on the galley proofs, a charge will be made to the authors.

Scientific articles should be mailed to The Journal of the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

# Advertising

Things have certainly changed. For example, when I started practice 30 plus years ago, there were no postoperative recovery rooms, no intensive care units, and each surgeon owned his own instruments (and needles) and carried them (heavy) from hospital to hospital. Doctors' lounges in hospitals were tiny little rooms where you could hang your coat. There were no doughnuts, no ham and eggs—not even any coffee. Doctors competed with each other for patients for the most part by trying to be better doctors and by trying to win the confidence of referring physicians. There was no advertising per se.

We now seem to be entering a new phase where advertising is becoming more and more acceptable. This is illustrated by comparing the telephone yellow pages of 1987 with those of 1957. There were no ads in 1957. Today there are many low key ads which, for the most part, simply describe the special services rendered by a physician or group of physicians. There is, I suppose, nothing wrong with it, and yet, the whole thing is somewhat distasteful and I would like to see us head it off before it goes any further. I can easily imagine that physician advertising could grow steadily so that a decade or two from now we may see extensive advertising not just in the yellow pages but in newspapers, on television, etc. If this should develop, it would be bad for our profession and bad for the public.

Maybe I'm being too idealistic, but I think there's something a little degrading about a doctor flaunting his own superiority (whether real or imaginary) before the public in some slickly conceived ad. And I also think that such entrepreneurial activities will ultimately do much to destroy the open and friendly relationship that doctors in Jefferson County and other parts of Kentucky have had with each other during recent decades.

The government favors advertising among doctors in the mistaken hope that competition thereby engendered will produce lower doctors' fees. A more probable result will be higher fees by those with the most extensive and successful advertising campaigns. Unfortunately, for the public, many of those successful campaigns will be conducted by doctors who are not of the highest quality. Imperfect as it has been, the system whereby patients have found their ways to doctors of their choice in the past is far superior to that which would exist if they were overwhelmed with a barrage of advertisements.

My plea is that we maintain the dignity of our profession by turning away from the current trend toward more and more advertising. Let's compete, instead, by just trying to be better doctors.

**McHenry S. Brewer, M.D.**



## Highlights of December KMA Board Meeting

Professional Liability Insurance (PLI) was one of the topics discussed during the December meeting of the KMA Board of Trustees. Wally O. Montgomery, M.D., Chairman of the KMA ad hoc Committee on PLI, reported that 23 meetings have been held by officer and/or staff on PLI activities. A PLI Conference "Competitive Interdependence" will be held March 11-12, in Lexington.

In other reports, Royce Dawson, M.D., President of the Board of Medical Licensure, indicated that 155 grievances had been investigated resulting in nine revocations, six probated licenses and two surrendered licenses at the Board's request.

Committee activities included the Board's adoption of the recommendation from the Committee on Medical Insurance and Prepayment Plans to increase rates 5% on the KMA-endorsed BCBS health insurance plan for KMA members, but not to include "Assurance Plus."

Harold D. Haller, M.D., Chairman of the Membership Committee reported that the increase in active members in 1986 was 4.3% over 1985. More than 1000 members have already joined for 1987. Doctor Haller was recognized during the meeting for his 10 years of service as AMA Delegate. He did not seek reelection after his term expired in December.

Nelson B. Rue, M.D., Chairman of the Committee to Investigate Changing Trends in Medicine, reported that Resolution J directed KMA to establish a clearinghouse on alternate delivery systems. The Board reviewed basic information on each licensed HMO and PPO operating in Kentucky, and it was reported that this information would be sent to the membership.

KMA staff reported that two recent developments in the Medicare Program required immediate action. The first related to the deadline for physicians to sign participating agreements which had been set for December 31, 1986. Be-



**KMA President Richard F. Hench, M.D., Lexington**



**KMA Board Members and Chairman, Nelson B. Rue, M.D., (head of table) Bowling Green.**

## **ASSOCIATION**

cause physicians did not have sufficient time to request necessary data from carriers to determine what fee raises to make in order to make a determination to participate, the AMA was seeking a temporary restraining order (TRO). To gain credibility for the TRO request, physicians were asked to send registered letters to carriers seeking information and to send copies to the AMA.

The second issue was the Reagan Administration proposal for reimbursement of physicians under Medicare using the Diagnosis Related Group methodology. This proposal was stated in the FY 87 Draft Budget, and physicians were urged to have their Republican Congressmen contact the White House to try to delete the Budget proposal.

The next meeting of the Board of Trustees is scheduled for April 15 and 16, 1987.

**Fred C. Rainey, M.D., Elizabethtown  
AMA Senior Delegate**



## **Trends Committee Meets to Discuss Resolutions**



**Trends Committee Chairman, Nelson B. Rue, M.D.**

KMA's Committee to Investigate Changing Trends in Medicine met on December 4 and discussed Resolution J, which deals with alternate delivery systems, and was adopted by the House of Delegates last September. At the Committee's request, a synopsis of each HMO doing business in Kentucky has been published and distributed to the membership.

The Committee also discussed Resolution Q, which was also passed by the House of Delegates, and addresses the loss of control of the practice of medicine by physicians and the hardships and inconvenience placed upon patients by contractual restrictions encompassed in various third party payment programs. The Committee is devising a plan to present to the Board of Trustees, when it meets in April, which will deal with various aspects of the issues raised in Resolution Q.



## Doctor Cooper Honored During Board Meeting



KMA President Richard F. Hench, M.D., (L) congratulates Doctor Cooper on his 10 years of service as Chairman of the State Legislative Committee.

Carl Cooper, Jr., M.D., Bedford, was given a special presentation on December 18, 1986, by the KMA Board of Trustees on his retirement after 10 years as Chairman of the KMA State Legislative Committee.

Doctor Cooper is Past President of the KMA and has served as AMA alternate Delegate and KEMPAC Director.

**H**umana Heart Institute  
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is pleased to announce...

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April 22, 1987/The Brown Hotel  
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This continuing medical education conference is designed for physicians specializing in family practice, internal medicine, cardiology, cardiovascular and thoracic surgery and other health care practitioners caring for patients with cardiovascular disease.

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Anthony N. DeMaria, M.D.	Bruce A. Reitz, M.D.
William C. DeVries, M.D.	Mark Siegler, M.D.
Lee V. Giorgi, M.D.	Eric Topol, M.D.
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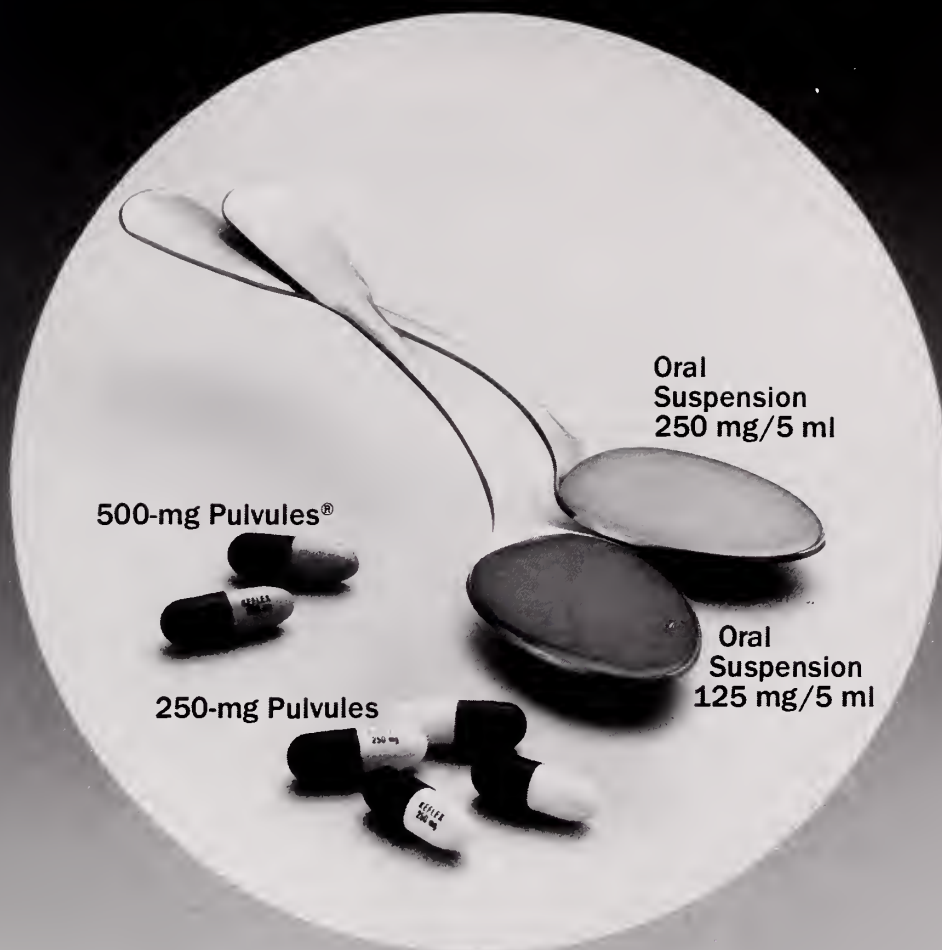
Designed to address recent advances in cardiology (invasive and non-invasive procedures, laser angioplasty, and pharmacologic therapy), this course will also provide an update on heart and heart/lung transplantation. Ethical and economic issues confronting medicine today will be discussed.

For registration information, please call or write Humana Heart Institute International, Humana Hospital – Audubon, One Audubon Plaza Drive, Louisville, Kentucky 40217. Telephone (502) 636-7135. Call toll free in Kentucky (800) 222-4332; or outside Kentucky (800) 227-3464.

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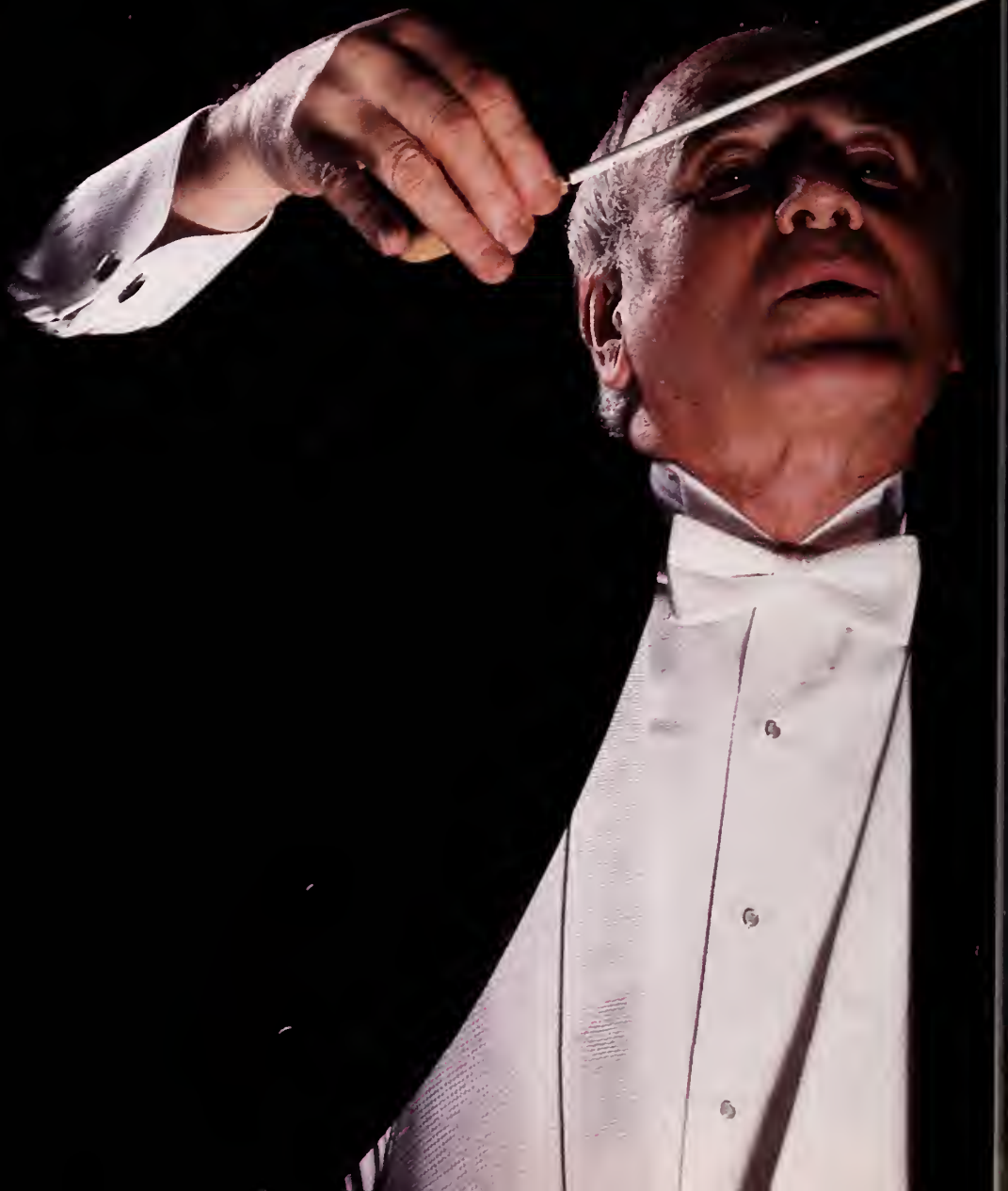


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Rapidly metabolized and excreted, with an excellent safety profile.<sup>1</sup> As with all sulfonylureas, hypoglycemia may occur.

In concert with diet in non-insulin-dependent diabetes mellitus

**Glucotrol<sup>®</sup>**  
(glipizide) 5-mg and 10-mg  
Scored Tablets



**SYNCHRONIZED  
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*Please see brief summary of Glucotrol<sup>®</sup> (glipizide) prescribing information on next page.*

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#### Reference:

1. Sachs R, Frank M, Fishman SK. Overview of clinical experience with glipizide. In *Glipizide: A Worldwide Review*. Princeton, NJ: Excerpta Medica, 1984. pp 163-172.

#### GLUCOTROL® (glipizide) Tablets

#### Brief Summary of Prescribing Information

**INDICATIONS AND USAGE:** GLUCOTROL is indicated as an adjunct to diet for the control of hyperglycemia in patients with non-insulin-dependent diabetes mellitus (NIDDM, type II) after an adequate trial of dietary therapy has proved unsatisfactory.

**CONTRAINDICATIONS:** GLUCOTROL is contraindicated in patients with known hypersensitivity to the drug or with diabetic ketoacidosis, with or without coma, which should be treated with insulin.

**SPECIAL WARNING ON INCREASED RISK OF CARDIOVASCULAR MORTALITY:** The administration of oral hypoglycemic drugs has been reported to be associated with increased cardiovascular mortality as compared to treatment with diet alone or diet plus insulin. This warning is based on the study conducted by the University Group Diabetes Program (UGDP), a long-term prospective clinical trial designed to evaluate the effectiveness of glucose-lowering drugs in preventing or delaying vascular complications in patients with non-insulin-dependent diabetes. The study involved 823 patients who were randomly assigned to one of four treatment groups (*Diabetes*, 19, supp. 2:747-830, 1970).

UGDP reported that patients treated for 5 to 8 years with diet plus a fixed dose of tolbutamide (1.5 grams per day) had a rate of cardiovascular mortality approximately 2-1/2 times that of patients treated with diet alone. A significant increase in total mortality was not observed, but the use of tolbutamide was discontinued based on the increase in cardiovascular mortality, thus limiting the opportunity for the study to show an increase in overall mortality. Despite controversy regarding the interpretation of these results, the findings of the UGDP study provide an adequate basis for this warning. The patient should be informed of the potential risks and advantages of GLUCOTROL and of alternative modes of therapy.

Although only one drug in the sulfonylurea class (tolbutamide) was included in this study, it is prudent from a safety standpoint to consider that this warning may also apply to other oral hypoglycemic drugs in this class, in view of their close similarities in mode of action and chemical structure.

**PRECAUTIONS: Renal and Hepatic Disease:** The metabolism and excretion of GLUCOTROL may be slowed in patients with impaired renal and/or hepatic function. Hypoglycemia may be prolonged in such patients should it occur.

**Hypoglycemia:** All sulfonylureas are capable of producing severe hypoglycemia. Proper patient selection, dosage, and instructions are important to avoid hypoglycemia. Renal or hepatic insufficiency may increase the risk of hypoglycemic reactions. Elderly, debilitated or malnourished patients and those with adrenal or pituitary insufficiency are particularly susceptible to the hypoglycemic action of glucose-lowering drugs. Hypoglycemia may be difficult to recognize in the elderly or people taking beta-adrenergic blocking drugs. Hypoglycemia is more likely to occur when caloric intake is deficient, after severe or prolonged exercise, when alcohol is ingested, or when more than one glucose-lowering drug is used.

**Loss of Control of Blood Glucose:** A loss of control may occur in diabetic patients exposed to stress such as fever, trauma, infection or surgery. It may then be necessary to discontinue GLUCOTROL and administer insulin.

**Laboratory Tests:** Blood and urine glucose should be monitored periodically. Measurement of glycosylated hemoglobin may be useful.

**Information for Patients:** Patients should be informed of the potential risks and advantages of GLUCOTROL, of alternative modes of therapy, as well as the importance of adhering to dietary instructions, of a regular exercise program, and of regular testing of urine and/or blood glucose. The risks of hypoglycemia, its symptoms and treatment, and conditions that predispose to its development should be explained to patients and responsible family members. Primary and secondary failure should also be explained.

**Drug Interactions:** The hypoglycemic action of sulfonylureas may be potentiated by certain drugs including non-steroidal anti-inflammatory agents and other drugs that are highly protein bound, salicylates, sulfonamides, chloramphenicol, probenecid, coumarins, monoamine oxidase inhibitors, and beta adrenergic blocking agents. *In vitro* studies indicate that GLUCOTROL binds differently than tolbutamide and does not interact with salicylate or dicumololol. However, caution must be exercised in extrapolating these findings to a clinical situation. Certain drugs tend to produce hyperglycemia and may lead to loss of control, including the thiazides and other diuretics, corticosteroids, phenothiazines, thyroid products, estrogens, oral contraceptives, phenytoin, nicotinic acid, sympathomimetics, calcium channel blocking drugs, and isoniazid. A potential interaction between oral miconazole and oral hypoglycemic agents leading to severe hypoglycemia has been reported. Whether this interaction also occurs with the intravenous, topical, or vaginal preparations of miconazole is not known.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** A 20-month study in rats and an 18-month study in mice at doses up to 75 times the maximum human dose revealed no evidence of drug-related carcinogenicity. Bacterial and *in vivo* mutagenicity tests were uniformly negative. Studies in rats of both sexes at doses up to 75 times the human dose showed no effects on fertility.

**Pregnancy:** Pregnancy Category C: GLUCOTROL (glipizide) was found to be mildly teratogenic in rat reproductive studies at all dose levels (5-50 mg/kg). This teratogenicity has been similarly noted with other sulfonylureas, such as tolbutamide and tolazamide. The effect is perinatal and believed to be directly related to the pharmacologic (hypoglycemic) action of GLUCOTROL. In studies in rats and rabbits no teratogenic effects were found. There are no adequate and well-controlled studies in pregnant women. GLUCOTROL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Because recent information suggests that abnormal blood glucose levels during pregnancy are associated with a higher incidence of congenital abnormalities, many experts recommend that insulin be used during pregnancy to maintain blood glucose levels as close to normal as possible.

**Nonteratogenic Effects:** Prolonged severe hypoglycemia has been reported in neonates born to mothers who were receiving a sulfonylurea drug at the time of delivery. This has been reported more frequently with the use of agents with prolonged half-lives. GLUCOTROL should be discontinued at least one month before the expected delivery date.

**Nursing Mothers:** Since some sulfonylurea drugs are known to be excreted in human milk, insulin therapy should be considered if nursing is to be continued.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:** In controlled studies, the frequency of serious adverse reactions reported was very low. Of 702 patients, 11.8% reported adverse reactions and in only 1.5% was GLUCOTROL discontinued.

**Hypoglycemia:** See PRECAUTIONS AND OVERDOSSAGE sections.

**Gastrointestinal:** Gastrointestinal disturbances, the most common, were reported with the following approximate incidence: nausea and diarrhea, one in 70; constipation and gastralgia, one in 100. They appear to be dose-related and may disappear on division or reduction of dosage. Cholestatic jaundice may occur rarely with sulfonylureas. GLUCOTROL should be discontinued if this occurs.

**Dermatologic:** Allergic skin reactions including erythema, morbilliform or maculopapular eruptions, urticaria, pruritus, and eczema have been reported in about one in 70 patients. These may be transient and may disappear despite continued use of GLUCOTROL; if skin reactions persist, the drug should be discontinued. Porphyria cutanea tarda and photosensitivity reactions have been reported with sulfonylureas.

**Hematologic:** Leukopenia, agranulocytosis, thrombocytopenia, hemolytic anemia, aplastic anemia, and pancytopenia have been reported with sulfonylureas.

**Metabolic:** Hepatic porphyria and disulfiram-like alcohol reactions have been reported with sulfonylureas. Clinical experience to date has shown that GLUCOTROL has an extremely low incidence of disulfiram-like reactions.

**Endocrine Reactions:** Cases of hyponatremia and the syndrome of inappropriate antidiuretic hormone (SIADH) secretion have been reported with this and other sulfonylureas.

**Miscellaneous:** Dizziness, drowsiness, and headache have been reported in about one in fifty patients treated with GLUCOTROL. They are usually transient and seldom require discontinuance of therapy.

**OVERDOSSAGE:** Overdosage of sulfonylureas including GLUCOTROL can produce hypoglycemia. If hypoglycemic coma is diagnosed or suspected, the patient should be given a rapid intravenous injection of concentrated (50%) glucose solution. This should be followed by a continuous infusion of a more dilute (10%) glucose solution at a rate that will maintain the blood glucose at a level above 100 mg/dL. Patients should be closely monitored for a minimum of 24 to 48 hours since hypoglycemia may recur after apparent clinical recovery. Clearance of GLUCOTROL from plasma would be prolonged in persons with liver disease. Because of the extensive protein binding of GLUCOTROL (glipizide), dialysis is unlikely to be of benefit.

**DOSSAGE AND ADMINISTRATION:** There is no fixed dosage regimen for the management of diabetes mellitus with GLUCOTROL, in general, it should be given approximately 30 minutes before a meal to achieve the greatest reduction in postprandial hyperglycemia.

**Initial Dose:** The recommended starting dose is 5 mg before breakfast. Geriatric patients or those with liver disease may be started on 2.5 mg. Dosage adjustments should ordinarily be in increments of 2.5-5 mg, as determined by blood glucose response. At least several days should elapse between titration steps.

**Maximum Dose:** The maximum recommended total daily dose is 40 mg.

**Maintenance:** Some patients may be effectively controlled on a once-a-day regimen, while others show better response with divided dosing. Total daily doses above 15 mg should ordinarily be divided.

**HOW SUPPLIED:** GLUCOTROL is available as white, dye-free, scored diamond-shaped tablets imprinted as follows: 5 mg tablet—Pfizer 411 (NOC 5 mg 0049-4110-66). Bottles of 100, 10 mg tablet—Pfizer 412 (NOC 10 mg 0049-4120-65). Bottles of 100.

**CAUTION:** Federal law prohibits dispensing without prescription.

More detailed professional information available on request.

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## Practice Management Workshops Scheduled

### CPT-4 and ICD-9-CM Coding

KMA, along with the Fayette and Jefferson County Medical Societies, are sponsoring two one-day workshops on "Third Party Reimbursement and Coding." Aimed primarily for office personnel who handle insurance billing and collection, the Lexington workshop will be held Thursday, March 12, at the Hyatt Regency Lexington. The workshop in Louisville is scheduled for Friday, March 13, at the Jefferson County Medical Society building at 101 W. Chestnut.

All aspects of CPT-4 and ICD-9-CM coding will be covered, including ways to analyze current fee profiles and to obtain maximum reimbursement from third parties. The workshops, which will run from 9 a.m. to 4 p.m., will be conducted by Conomikes Associates, Inc., a nationally-known practice management consulting firm.

To request a registration form, contact FCMS, JCMS or KMA.

### New Physician Workshop

The Fifth KMA "How to Get Started in Medical Practice" workshop will be held March 10-11 at the Hyatt Regency in Lexington. Also being presented by Conomikes Associates, the one and a half day session is designed for physicians seeking direction in establishing a medical practice. Topics to be covered include: practice setting and marketing techniques, financing, medical records, scheduling, personnel, and collections.

Over 100 physicians and spouses have taken part in the previous workshops which are normally held twice a year. For further information on this workshop, please contact the KMA Office at (502)459-9790.



George Conomikes, President, Conomikes Associates, presented KMA's Fourth "How to Get Started in Medical Practice" Workshop, November 6-7, 1986, at the KMA Headquarters Office in Louisville. Over 25 physicians and spouses attended the session.



**AIM HIGH**

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# Application for Scientific Exhibits

1987 Annual Meeting

Kentucky Medical Association

Ramada Inn East—Bluegrass Convention Center

Louisville, Kentucky

September 15-17

1. Title of exhibit \_\_\_\_\_
2. Name(s) of exhibitor(s) \_\_\_\_\_  
Address \_\_\_\_\_  
Professional title \_\_\_\_\_
3. Institution if other than exhibitor \_\_\_\_\_
4. Amount of backwall footage required \_\_\_\_\_  
(The draped booth has 4' side walls. This footage should not be included in backwall footage required.)  
TABLE DESIRED? \_\_\_\_\_ (Table 2' deep X width of backwall (footage) Electrical outlet desired \_\_\_\_\_
5. Will summary printed matter be available or obtainable for the interested physician? \_\_\_\_\_
6. Indicate sources of assistance provided to you in connection with this exhibit \_\_\_\_\_  
\_\_\_\_\_
7. Has this exhibit been displayed before? If so, when & where? \_\_\_\_\_  
\_\_\_\_\_
8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date \_\_\_\_\_

Signature of Applicant \_\_\_\_\_

Fill Out and Mail to:

**RICHARD A. KIELAR, M.D., Chairman**  
Scientific Exhibits Committee  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 1, 1987

- KMA provides, without cost to the exhibitor, one 2 ft. Table, bracket lights and a title sign.
- Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the George E. Fern Company, 328 Louisville Air Park, Louisville, Kentucky 40213.
- *Commercial* exhibit materials and handouts are prohibited in the Scientific Exhibit area.
- Transportation and erection costs are the responsibility of the exhibitor.
- Exhibit *must be attended* during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.
- Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.
- Exhibit must be dismantled and removed by 4:00 P.M., Thursday, September 17, 1987.
- Exhibit space is *strictly limited* to footage and space allotted. No exhibit may extend into the aisle.

Ramada Inn East—Bluegrass Convention Center and the Kentucky Medical Association or its agents cannot guarantee against loss or damage and will assume no liability for damages nor guarantee the exhibitor against loss of any kind. The exhibitor agrees, with the Association, to be responsible to the Ramada Inn East—Bluegrass Convention Center for damages that may occur as a result of the exhibitor's use of the facility.

## ACCREDITATION

KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category I credit.



## PHYSICIANS, SCHEDULE SOME TIME FOR YOUR COUNTRY.

Many physicians would like to devote some time to their country in a local Army Reserve unit. We know that making a weekend commitment can be difficult for most physicians. So it is practical for the Army Reserve units to be flexible about time. It's worth discussing.

Incidentally, in addition to satisfying your own desire to serve your country, there are exceptional opportunities to do something totally different from a day-to-day routine. Opportunities to study new areas of medicine, meet new people in your specialty, and be a part of one of the world's most advanced medical teams.

Discuss the opportunities with our Army Medical Personnel Counselor.

## FOR SURGEONS LOOKING FOR A CHALLENGE.

Your challenge could be the Army Reserve unit near you. It's a unit that requires the services of surgeons.

You may wish to explore the challenge of teaching in a major medical center. You may wish to explore the special challenges of your specialty in triage. Certainly you'll be confronted by challenges very different from your daily routine.

You'll also have an opportunity to participate in a number of programs in which you'll be able to exchange views and information with other surgeons from all over the country.

The Army Reserve understands the time demands on a busy physician, so you can count on us to be totally flexible in making time for you to share your specialty with your country. We'll arrange your training program to work with your practice.

To find out about the benefits of serving with a nearby Army Reserve unit, we recommend you call our Army Medical Personnel Counselor.

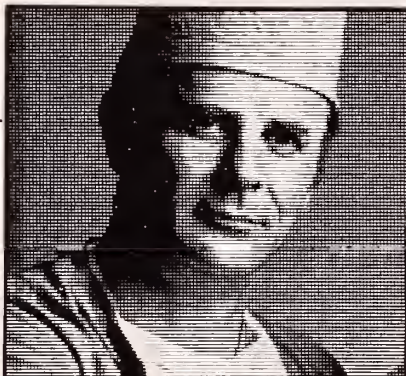
## PHYSICIANS, THERE ARE TWO KINDS OF FLEXIBILITY IN THE ARMY RESERVE WE THINK YOU'LL LIKE.

One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

Two, the opportunity to explore other phases of medicine, to add a different kind of knowledge—the challenge of military health care. It's a flexibility which could prove to be both stimulating and rewarding, with the opportunity to participate in a variety of programs that can put you in contact with medical leaders from all over the country.

See how flexible we can be, call our Army Medical Personnel Counselor.

**ARMY RESERVE.  
BE ALL YOU CAN BE.**



## HERE'S ONE DOCTOR WHO WON'T PAY HIS MALPRACTICE PREMIUMS THIS YEAR.

The Army covers his premiums. Since he's an Army Physician, there are a lot of worries associated with private practice that he won't have to contend with. Like excessive paperwork, and the overhead costs incurred in running a private practice.

What he will get is a highly challenging, highly rewarding experience. The Army offers varied assignments, chances to specialize, or further your education, and to work with a team of dedicated health care professionals. Plus a generous benefits package.

If you're interested in practicing high quality health care with a minimum of administrative burdens, examine Army medicine. Talk to your local Army Medical Department Counselor for more information.

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BE ALL YOU CAN BE.**

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140

130

120

110

100

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60

50

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In mild to moderate hypertension

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BLOCKER**



**NEW**  
**ONCE DAILY**



# ISOPTIN<sup>SR</sup>\*

(verapamil HCl/Knoll)

240 mg scored, sustained-release tablets



**JAMES B.**

38, black male, heavy smoker. Prescribed a diuretic by another physician last year for hypertension.

**YOUR CONCERNS**

Presents with "smoker's cough." Workup reveals a BP of 150/107.

**A LOGICAL CHOICE FOR CONTROL OF HIS BP**

ISOPTIN<sup>SR</sup> (verapamil HCl/Knoll) because...

— Black hypertensives often have low plasma renin activity and generally do not respond favorably to beta blockers.

— Beta blockers may increase the likelihood of bronchospasm.

**ALICE W.**

65, diabetic, overweight. Her BP has elevated to 190/98.

**YOUR CONCERNS**

She's on daily insulin.

**A LOGICAL CHOICE FOR CONTROL OF HER BP**

ISOPTIN<sup>SR</sup> (verapamil HCl/Knoll) because...

— Unlike most beta blockers and diuretics, ISOPTIN has no adverse effects on serum glucose levels.

— Unlike most beta blockers, ISOPTIN does not mask the symptoms of hypoglycemia.



**THOMAS G.**

70, asthmatic. In the past, BP adequately controlled with 25 mg hydrochlorothiazide daily.

**YOUR CONCERNS**

Today patient presents with symptoms of gout. Workup reveals high uric acid level, low serum potassium, and BP elevated to 180/98.

**A LOGICAL CHOICE FOR CONTROL OF HIS BP**

ISOPTIN<sup>SR</sup> (verapamil HCl/Knoll) because...

— Unlike diuretics, ISOPTIN will not decrease serum potassium levels or elevate uric acid levels.

— Unlike beta blockers, ISOPTIN can be used safely in asthma and COPD patients.

**JOHN K.**

42, Annual physical uncovered diastolic BP of 102... confirmed on three successive office visits. Unresponsive to nonpharmacologic intervention.

**YOUR CONCERNS**

Salesman, spends many hours of his working day in car... total cholesterol level 300, HDL 35.

**A LOGICAL CHOICE FOR CONTROL OF HIS BP**

ISOPTIN<sup>SR</sup> (verapamil HCl/Knoll) because...

— Unlike diuretics, ISOPTIN does not cause urinary urgency.

— Unlike either beta blockers or diuretics, ISOPTIN will not adversely affect his already seriously compromised lipid profile.

— Unlike with propranolol, fatigue and impotence are rarely reported.



**Antihypertensive therapy you  
and your patients can live with**

\*A product of Knoll research.

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2538/1-87

Knoll Pharmaceuticals  
A Unit of BASF K&F Corporation  
Whippany, New Jersey 07981

BASF Group



Printed in U.S.A.

**In mild to moderate hypertension**  
**THE FIRST ONCE DAILY**  
**CALCIUM CHANNEL BLOCKER**

Brief Summary

**ISOPTIN® SR**  
**(verapamil HCl/Knoll)**  
**240 mg scored, sustained-release tablets**

**CONTRAINDICATIONS:** 1) Severe left ventricular dysfunction (see WARNINGS), 2) Hypotension (less than 90 mmHg systolic pressure) or cardiogenic shock, 3) Sick sinus syndrome or 2nd or 3rd degree AV block (except in patients with a functioning artificial ventricular pacemaker).

**WARNINGS:** **Heart Failure:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (see DRUG INTERACTIONS). Patients with milder ventricular dysfunction should, if possible, be controlled before verapamil treatment. **Hypotension:** ISOPTIN (verapamil HCl) may produce occasional symptomatic hypotension. **Elevated Liver Enzymes:** Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Periodic monitoring of liver function in patients receiving verapamil is therefore prudent. **Accessory Bypass Tract (Wolff-Parkinson-White):** Patients with paroxysmal and/or chronic atrial flutter or atrial fibrillation and a coexisting accessory AV pathway have developed increased antegrade conduction across the accessory pathway producing a very rapid ventricular response or ventricular fibrillation after receiving intravenous verapamil. While this has not been reported with oral verapamil, it should be considered a potential risk. Treatment is usually D.C.-cardioversion. **Atrioventricular Block:** The effect of verapamil on AV conduction and the SA node may cause asymptomatic 1st degree AV block and transient bradycardia. Higher degrees of AV block, while infrequent (0.8%), may require a reduction in dosage or, in rare instances, discontinuation of verapamil HCl. Patients with Hypertrophic Cardiomyopathy (IHSS): Although verapamil has been used in the therapy of patients with IHSS, severe cardiovascular decompensation and death have been noted in this patient population.

**PRECAUTIONS:** **Impaired Hepatic or Renal Function:** Verapamil is highly metabolized by the liver with about 70% of an administered dose excreted in the urine. In patients with impaired hepatic or renal function verapamil should be administered cautiously and the patients monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacological effects (see OVERDOSAGE).

**Drug Interactions:** **Beta Blockers:** Concomitant use of ISOPTIN and oral beta-adrenergic blocking agents may be beneficial in certain patients with chronic stable angina or hypertension, but available information is not sufficient to predict with confidence the effects of concurrent treatment in patients with left ventricular dysfunction or cardiac conduction abnormalities. **Digitalis:** Clinical use of verapamil in digitalized patients has shown the combination to be well tolerated if digoxin doses are properly adjusted. However, chronic verapamil treatment increases serum digoxin levels by 50 to 75% during the first week of therapy and this can result in digitalis toxicity. Upon discontinuation of ISOPTIN (verapamil HCl), the patient should be reassessed to avoid underdigitalization. **Antihypertensive Agents:** Verapamil administered concomitantly with oral antihypertensive agents (e.g., vasodilators, angiotensin-converting enzyme inhibitors, diuretics, beta blockers, prazosin) will usually have an additive effect on lowering blood pressure. Patients receiving these combinations should be appropriately monitored. **Disopyramide:** Disopyramide should not be administered within 48 hours before or 24 hours after verapamil administration. **Quinidine:** In patients with hypertrophic cardiomyopathy (IHSS), concomitant use of verapamil and quinidine resulted in significant hypotension. There has been a report of increased quinidine levels during verapamil therapy. **Nitrates:** The pharmacologic profile of verapamil and nitrates as well as clinical experience suggest beneficial interactions. **Cimetidine:** Two clinical trials have shown a lack of significant verapamil interaction with cimetidine. A third study showed cimetidine reduced verapamil clearance and increased elimination to 1/2. **Anesthetic Agents:** Verapamil may potentiate the activity of neuromuscular blocking agents and inhalation anesthetics. **Carbamazepine:** Verapamil may increase carbamazepine concentrations during combined therapy. **Rifampin:** Therapy with rifampin may markedly reduce oral verapamil bioavailability. **Lithium:** Verapamil may lower lithium levels in patient on chronic oral lithium therapy. **Carcinogenesis, Mutagenesis, Impairment of Fertility:** There was no evidence of a carcinogenic potential of verapamil administered to rats for two years. Verapamil was not mutagenic in the Ames test. Studies in female rats did not show impaired fertility. Effects on male fertility have not been determined. **Pregnancy (Category C):** There are no adequate and well-controlled studies in pregnant women. ISOPTIN crosses the placental barrier and can be detected in umbilical vein blood at delivery. This drug should be used during pregnancy, labor, and delivery, only if clearly needed. **Nursing Mothers:** ISOPTIN is excreted in human milk, therefore, nursing should be discontinued while verapamil is administered. **Pediatric Use:** Safety and efficacy of ISOPTIN in children below the age of 18 years have not been established.

**ADVERSE REACTIONS:** Constipation 8.4%, dizziness 3.5%, nausea 2.7%, hypotension 2.5%, edema 2.1%, headache 1.9%, CHF/pulmonary edema 1.8%, fatigue 1.7%, bradycardia 1.4%, 3° AV block 0.8%, flushing 0.1%, elevated liver enzymes (see WARNINGS). The following reactions, reported in less than 1.0% of patients, occurred under conditions (open trials, marketing experience) where a causal relationship is uncertain; they are mentioned to alert the physician to a possible relationship: angina pectoris, arthralgia and rash, AV block, blurred vision, cerebrovascular accident, chest pain, claudication, confusion, diarrhea, dry mouth, dyspnea, ecchymosis or bruising, equilibrium disorders, exanthema, gastrointestinal distress, gingival hyperplasia, gynecomastia, hair loss, hyperkeratosis, impotence, increased urination, insomnia, macules, muscle cramps, myocardial infarction, palpitations, paresthesia, psychotic symptoms, purpura (vasculitis), shakiness, somnolence, spotty menstruation, sweating, syncope, urticaria. **Treatment of Acute Cardiovascular Adverse Reactions:** Whenever severe hypotension or complete AV block occur following oral administration of verapamil, the appropriate emergency measures should be applied immediately, e.g., intravenously administered isoproterenol HCl, levalterenol bitartrate, atropine (all in the usual doses), or calcium gluconate (10% solution). If further support is necessary, inotropic agents (dopamine or dobutamine) may be administered. Actual treatment and dosage should depend on the severity and the clinical situation and the judgment and experience of the treating physician.

**OVERDOSAGE:** Treatment of overdosage should be supportive. Beta-adrenergic stimulation or parenteral administration of calcium solutions may increase calcium ion flux across the slow channel, and have been used effectively in treatment of deliberate overdosage with verapamil. Clinically significant hypotensive reactions or fixed high degree AV block should be treated with vasopressor agents or cardiac pacing, respectively. Asystole should be handled by the usual measures including cardiopulmonary resuscitation.

**Knoll Pharmaceuticals**  
A Unit of BASF K&F Corporation  
Whippany, New Jersey 07981



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**Health and Safety Tip From**  
**the American Medical Association**

**MARKERS LISTED TO**  
**IDENTIFY ALCOHOLICS**

**How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?**

**The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.**

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.
2. Drinking to handle problems or relieve symptoms.
3. Obvious preoccupation with alcohol and the frequent need to have a drink.
4. Surreptitious drinking or gulping of drinks.
5. Tendency toward making alibis and weak excuses for drinking.
6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.
7. Frequent absenteeism from the job, especially following weekends and holidays.
8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.
9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.
10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.
11. Multiple contacts with the health care system with disorders that are alcohol caused or related.
12. Persistent marital and family problems, perhaps with multiple marriages.
13. History of arrests for drunkenness or drunken driving.

*Submitted by the KMA Impaired Physicians' Committee*



# AWARD NOMINATION

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Birth Date: \_\_\_\_\_ Place: \_\_\_\_\_

Marital Status: \_\_\_\_\_

Spouse's Name: \_\_\_\_\_

Children: \_\_\_\_\_

☐ Distinguished Service  
Award (Physician)

☐ KMA Award  
(Lay Person)

Education: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Military: \_\_\_\_\_

Membership in Professional Organizations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Membership in Civic Organizations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Honors and Awards: \_\_\_\_\_

(Describe nominees qualifications and other pertinent information which the Awards Committee may consider in making its decision).

Name of Person or Group Submitting Nomination: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: (Home) \_\_\_\_\_

(Office) \_\_\_\_\_

## Awards Nominations

The KMA Awards Committee is accepting nominations for the two highest awards the Association presents. The Distinguished Service Award is presented annually to a member of the Association based on the following criteria:

Contributions to organized medicine (including membership in county society, attendance of county and state meetings, service on committees, leadership as an officer, etc.)

Individual medical service

Community health, education and civic betterment

Medical research

The nominee may qualify on any one or all combinations of these points. Reasons for the nominations should be clearly stated.

The Kentucky Medical Association Award is presented to an outstanding lay person in Kentucky each year in honor of his or her outstanding accomplishments in the field of public health and/or medical care.

The Awards Committee will have the responsibility to choose recipients of the KMA Distinguished Service Award and the Kentucky Medical Association Award. Any county society or individual member may suggest nominees to the committee.

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### A Tribute to Joan Titley Adams, Librarian *Par Excellence*

Joan Titley Adams at home in the world of books  
Helping others get information from knowledge's flowing brooks.  
Patron, helper, Open O sesame for research.  
Faithful keeper of the Health Sciences Library, Church,  
Fighter to retain the library at the Medical School *Cor*,  
Each scientific advance helping us realize we need it more.  
Poisoned early with publications' ink  
Committed to implore that each of us think  
About how we can possibly open one door  
To understand one of nature's laws a bit more.  
Oh great keeper of the temple of science  
We thank thee for providing the essence  
For understanding of our own work  
And our duty to science never to shirk.  
We continue to benefit from thy life's flame  
And spread across the health sciences thy true fame.  
We appreciate thy worth and productive life dear friend  
Which will enrichen our lives to the end.  
Farewell Joan Titley Adams till we meet again.

Billy F. Andrews, M.D.  
October 28, 1986



## KMA Physician Placement Service

Physician placement is another service offered by the Kentucky Medical Association. The Association acts as a clearinghouse by providing assistance to physicians seeking practice opportunities in Kentucky and to anyone who is searching for a physician.

A booklet entitled "Practice Opportunities in Kentucky" is published in January and July. In our January edition, we combined our services with those offered by the Kentucky Physician Placement Service, Cabinet for Human Resources, Frankfort, Kentucky. As a result, there is a substantial increase in the number of opportunities listed. If you have just completed your

medical training or are interested in a change of location, you will find this booklet helpful.

Kentucky Medical Association also publishes bi-monthly a "Physician Seeking" list which briefly outlines the background of the physician. This list is disseminated to communities, hospitals, clinics and physicians who are seeking the services of a physician.

If you are interested in these KMA services, please contact the Physician Placement Office, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205; telephone: 502-459-9790.

### CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. \$5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

**GREAT LAKES ASS'N OF CLINICAL MEDICINE PRESENTS:** *True Preventive Medicine* "Nutrition Is Therapy": Jonathan Wright, M.D. of Wright/Gaby Foundation, March 26-27 (1½ days). "Elemental Medicine": International Congress with noted speakers, March 27-28 (1½ days). Contact Warren Delano, 24700 Center Ridge Road, Westlake, Ohio 44145. (216)835-1212.

**Family Physician or Internist** to associate with a busy solo practice in Richmond, Kentucky. Respond to phone (606) 623-8431.

**Office Space** in Medical/Dental Building between all hospitals. 1,000 to 4,500 sq. ft. 1636 Nicholasville Road, Lexington. Phone 278-0576. 8.00/11.50 per square ft.

**KENTUCKY: Excellent emergency department opportunities** available in three moderate volume hospitals. ACA physicians enjoy competitive compensation, paid occurrence type malpractice insurance, CME allotment, flexible scheduling, assistance with relocation expenses. For detailed information, contact Acute Care America, 641 Sixth Street, Huntington, WV 25701; 1-800-231-0342 or 304-525-0852.

# Motrin<sup>®</sup> 800 TABLETS mg ibuprofen



Extra strength  
Convenience  
Economy



A Century  
of Caring  
1886-1986





**There's never been  
a better time for her...  
and  
PREMARIN<sup>®</sup>**  
(Conjugated Estrogens Tablets)

# **Now the evidence looks better than ever**

## **Significantly reduced risk of endometrial hyperplasia**

Endometrial hyperplasia was significantly reduced when progestin was added to PREMARIN therapy for more than ten days a month.<sup>1-4</sup> The risk of endometrial hyperplasia may also be reduced through cyclic administration of unopposed, low-dose PREMARIN.

## **Effect on lipids—an important feature**

PREMARIN used alone does not adversely affect lipid levels. In fact, a clinical study has shown a significant increase in HDL cholesterol—from 49.7 mg/dL to 56.4 mg/dL—and decrease in LDL cholesterol—from 165.1 mg/dL to 138.1 mg/dL—after one year of therapy with PREMARIN, 0.625 mg.<sup>5</sup>

## **Low-dose control of menopausal symptoms\***

PREMARIN effectively relieves vasomotor symptoms, such as hot flashes. When estrogen deficiency is limited to atrophic vaginitis, PREMARIN<sup>®</sup> (conjugated estrogens) Vaginal Cream restores the vaginal environment to its premenopausal state.

**The most widely used, most extensively studied estrogen worldwide.**

**PREMARIN<sup>®</sup>**  
(Conjugated Estrogens Tablets)

**Most trusted for more reasons**

\*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

Please see following page for brief summary of prescribing information.



For moderate-to-severe  
vasomotor symptoms

## PREMARIN® (Conjugated Estrogens Tablets)



0.3 mg 0.625 mg 0.9 mg 1.25 mg 2.5 mg

The appearance of these tablets is a trademark of Ayerst Laboratories.

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)

PREMARIN® Brand of conjugated estrogens tablets, USP

PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

### 1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

### 2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

**DESCRIPTION:** PREMARN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17 $\alpha$ -dihydroequilin, together with smaller amounts of 17 $\alpha$ -estradiol, equilin, and 17 $\alpha$ -dihydroequilin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

**INDICATIONS AND USAGE:** PREMARN (conjugated estrogens tablets, USP): Moderate-to-severe vasomotor symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) Osteoporosis (abnormally low bone mass). Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

**Concomitant Progestin Use:** The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

**CONTRAINDICATIONS:** Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

**WARNINGS:** Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this question. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with

For atrophic vaginitis

## PREMARIN® (Conjugated Estrogens)

Vaginal  
Cream

0.625mg/g



caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

**PRECAUTIONS:** Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

- Increased sulfobromophthalen retention
  - Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased nor-epinephrine-induced platelet aggregability
  - Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered
  - Impaired glucose tolerance
  - Decreased pregnandiol excretion
  - Reduced response to metyrapone test
  - Reduced serum folate concentration
  - Increased serum triglyceride and phospholipid concentration
- As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

**ADVERSE REACTIONS:** The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow, dysmenorrhea, premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyoma; vaginal candidiasis; change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

**ACUTE OVERDOSAGE:** May cause nausea, and withdrawal bleeding may occur in females.

### DOSSAGE AND ADMINISTRATION:

PREMARN® Brand of conjugated estrogens tablets, USP

1. Given cyclically for short-term use only. For treatment of moderate to severe vasomotor symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. Given cyclically: Female castration. Osteoporosis: Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

### References:

- Whitehead ML, Townsend PT, Pryse-Davies J, et al. Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605. 2. Paterson MEL, Wade-Evans T, Sturdee DW, et al. Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824. 3. Magos AL, Brinac M, Studd JWW, et al. Amenorrhea and endometrial activity with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985;67:496-499. 4. Whitehead ML, Lane G, Siddie N, et al. Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:41-52. 5. Barnes RB, Roy S, Lobo RA. Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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T6194/B86

# KEMPAC Elects Officers For 1987

KEMPAC officers were elected at the KEMPAC Board of Directors Meeting held in Louisville, December 18, 1986 as follows:

Harold L. Bushey, M.D.	Chairman
David B. Stevens, M.D.	Vice-Chairman
Walter H. Zukof, M.D.	Treasurer
K. Thomas Reichard, M.D.	Assistant Treasurer
Francis Halcomb, M.D.	Secretary

KEMPAC will be celebrating its 25th Anniversary this year. KEMPAC was founded in January 1962, and exists to give the Kentucky physician an effective means of political action. The KEMPAC Board of Directors urges you to become involved.

The districts and directors are:

## **First Congressional District**

Danny Hatfield, M.D. – Trover Clinic, Madisonville, KY 42431

Larry C. Franks, M.D. – 216 Berger Road, Paducah, KY 42001

## **Second Congressional District**

M. A. Douglass, Jr., M.D. – Magnolia, KY 42757

Francis Halcomb, M.D. – 217 W. Main St., Scottsville, KY 42164

## **Third Congressional District**

K. Thomas Reichard, M.D. – Suite 7A Suburban Medical Plaza, Louisville, KY 40207

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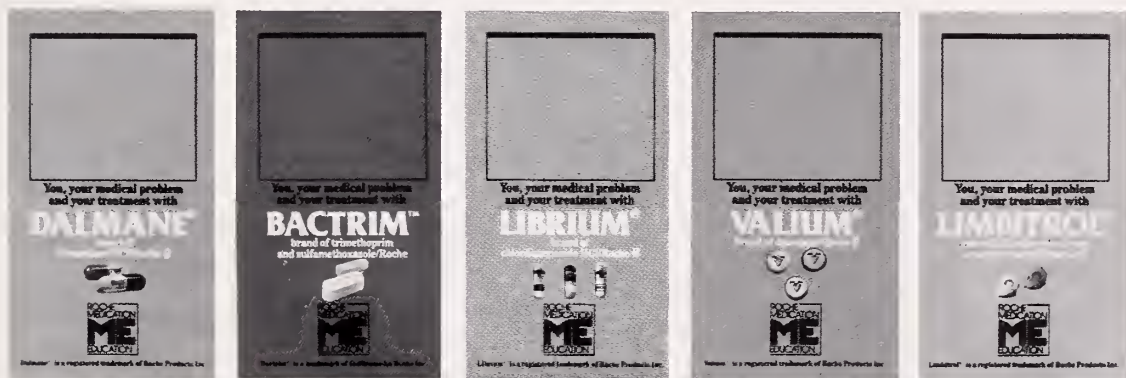


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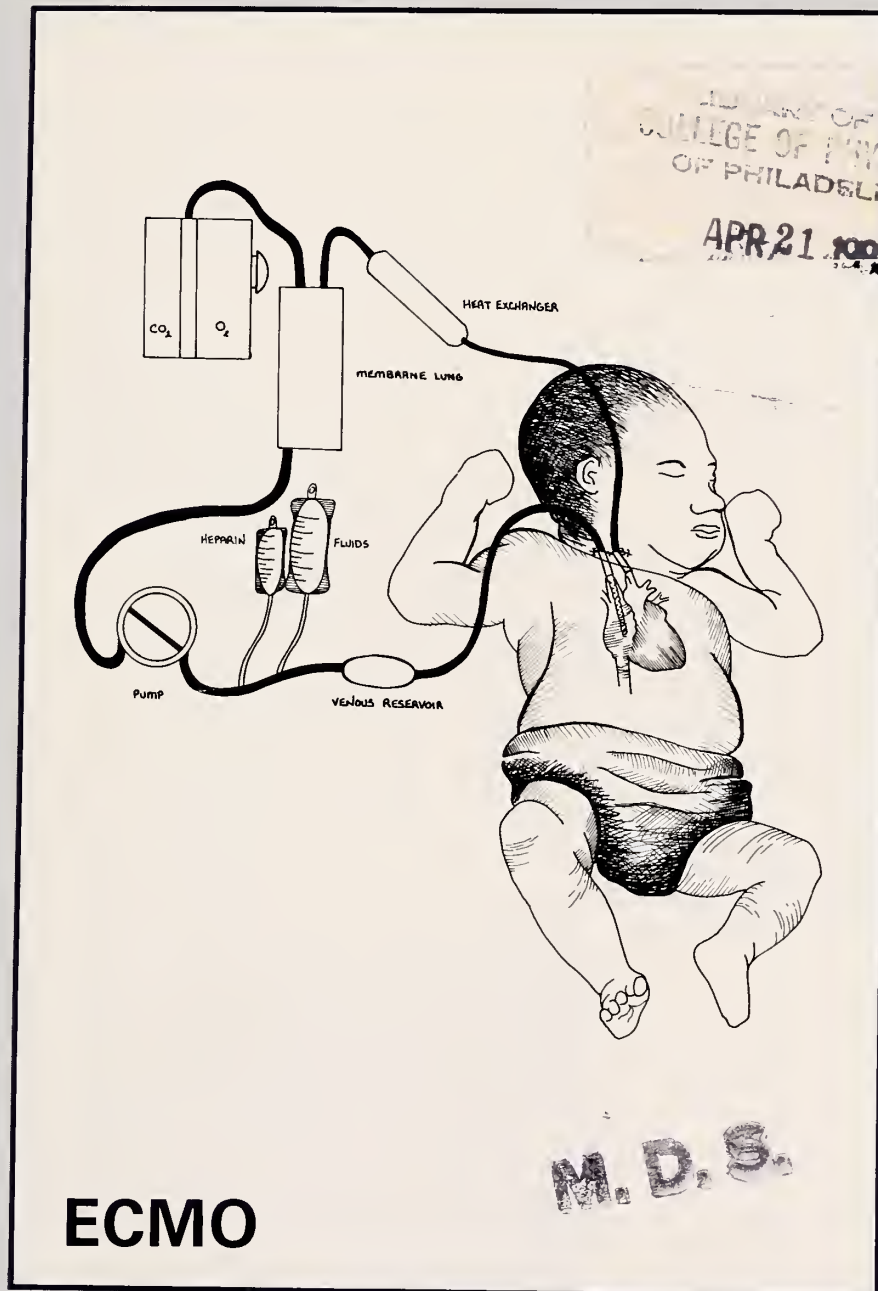
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April 1987

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The subject of this month's cover is Extracorporeal Membrane Oxygenation (ECMO). ECMO provides temporary life support to allow lung recovery in neonates with reversible forms of cardiopulmonary failure.

Cover art by Rex Lagerstrom, M.D. with special thanks to David H. Adamkin, M.D. and Charles R. Hamm, M.D.

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## Liability Progress Note

**I**n September, as most of you will recall, the House of Delegates passed Resolution F, indicating that the professional liability crisis was the number one priority of KMA. A four-pronged campaign plan has been developed and I would like to give you a progress report.

The four areas of activity are: government, KMA membership, public sector, and public education. Numerous committee meetings and continuous leadership/staff activities have occurred. Time and space here will allow only some highlights of our progress.

**A. Governmental Activities** — Individual education packets for every Legislator have been compiled. Personal meetings between key legislative committee members, their constituent physician, and KMA leadership are in progress. Because of the blizzard of confusing information and disinformation about professional liability, it is essential that we keep the Legislators well informed.

The Legislative Task Force, on which I have spent many long hours, is nearing its final recommendations. It is still too early to tell whether this will be positive or not, but the Task Force can certainly make our job much easier or much harder.

Our Kentucky national Legislators seem sympathetic to our problems and we are in regular contact with them, but as of this writing it seems that the most we can hope for from Washington is some type of incentive bill, such as the Hatch Bill, to encourage states to take action. This will be explored in detail during the upcoming Washington Dinner.

**B. KMA Membership Involvement** — An active, well-informed membership is the cornerstone of our efforts — without that the rest is useless. Through the "Communicator," the *KMA Journal*, special mailings, Trustee meetings, hospital staff and medical society meetings, and our

seminar on professional liability in March, we have, and are trying to inform and motivate our members. In this time of state legislative independence, a few leaders and a few staff people just cannot get the job done no matter how hard they work.

Membership activity will increase as we move toward the September KMA meeting, the December Key contact seminar, and the 1988 Legislature.

**C. Private Sector Initiatives** — KMA has continued a strong leadership role in the Tort Reform Association of Kentucky (TRAK). In January, we participated in a reception for the Legislators in Frankfort, and Bill Doll did the majority of the work in an excellent presentation to the Task Force on the effects of the liability crisis on many sectors of Kentucky life.

We believe an active coalition stressing the society-wide effects of the liability crisis is essential for our success.

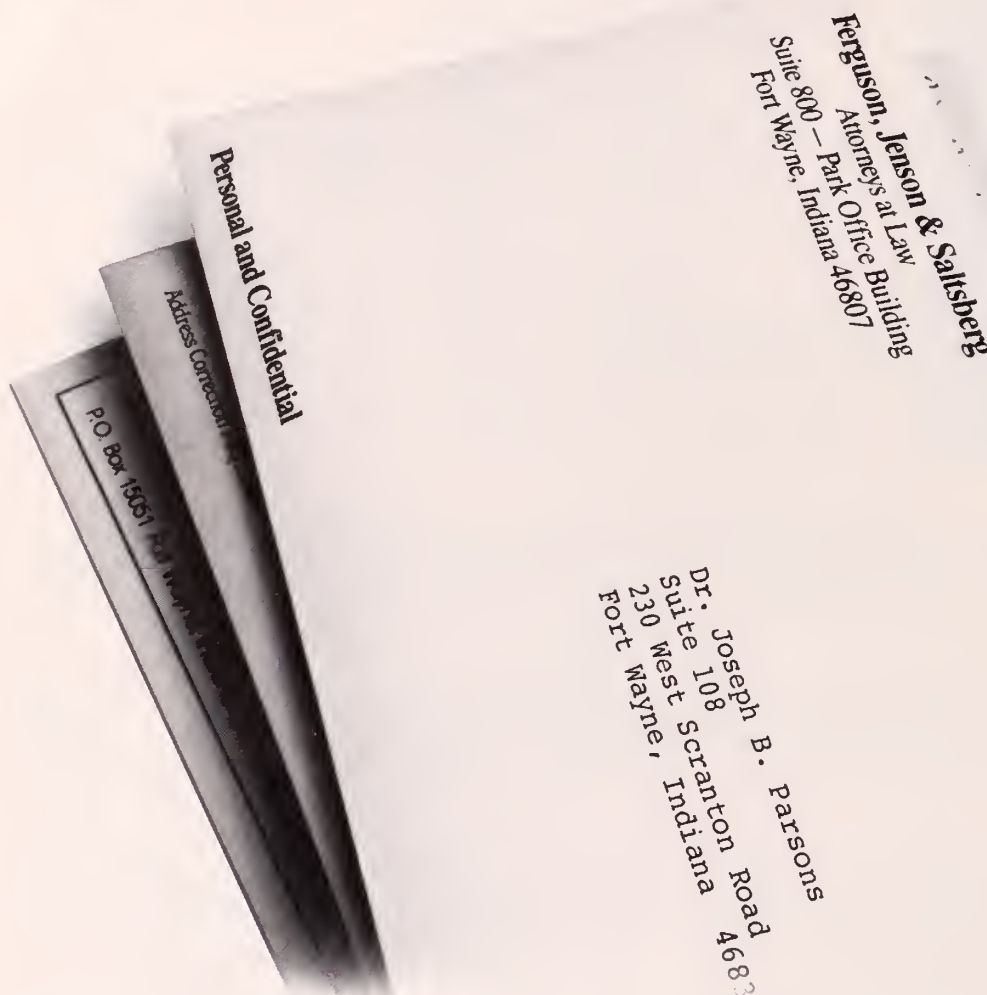
**D. Public Relations Campaign** — We have contracted with two public relations firms: one for its expertise in public education and opinions, and the other for its political experience. We are working daily with them and the extent of their involvement in our campaign will depend on how the struggle evolves. The report of the Task Force and our interaction with the trial lawyers will have a great bearing on the amount of time and money we will need to devote to public education.

This has been a brief sketch of the efforts of many people over the last several months. In the days ahead, we will need the help of every physician in Kentucky so that we can carry our message to the Legislature and the public.

Richard F. Hench, M.D.  
KMA President



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INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of Inderal LA has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. Inderal LA has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, Inderal LA also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilation activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

**INDICATIONS AND USAGE. Hypertension:** Inderal LA is indicated in the management of hypertension, it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal LA is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal LA.

**WARNINGS. CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE.** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics and the response observed closely, or Inderal should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior

to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOGLYCEMIA.** Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case, this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS. General.** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**Clinical Laboratory Tests.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncope attacks, or orthostatic hypotension.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**Pregnancy.** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

**Pediatric Use.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

**Gastrointestinal:** nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** bronchospasm.

**Hematologic:** agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-Immune.** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSEAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal tablets to Inderal LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg for mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg Inderal LA once daily.**

**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. Inderal LA National Compliance Evaluation Program. Data on file, Ayerst Laboratories.
2. Ravid M, Lang R, Jurni I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol and metoprolol given once daily. *Arch Intern Med* 1985; 145: 1321-1323.

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# Extracorporeal Membrane Oxygenation in the Critically Ill Neonate

LARRY N. COOK, M.D. AND DILLER B. GROFF, M.D.

In May 1985, after one and one-half years of preparation including classroom study, animal lab training and visits to established programs, a program in extracorporeal membrane oxygenation (ECMO) was inaugurated at the Kosair Children's Hospital. The program was established and supported in part by the Kosair Children's Hospital and grants from the Crusade for Children and the Brown Foundation. To date, 22 newborn infants with cardiopulmonary failure have been treated and 20 have survived, (90%). All surviving infants, except for a single child with a severe CNS congenital anomaly, appear to have normal growth and development. The two neonates not surviving had birth defects not recoverable with ECMO: severe pulmonary hypoplasia and total anomalous pulmonary venous return. (Table I). The purpose of this report is to present an overview of extracorporeal membrane oxygenation as it applies to the critically ill neonate.

Extracorporeal membrane oxygenation involves extracorporeal circulation and membrane oxygenation of blood by a modified heart-lung apparatus (Fig. 1).<sup>1,2,3,4</sup> ECMO provides temporary life support to allow lung recovery in neonates with reversible forms of cardiopulmonary failure. Reversible cardiopulmonary failure in the neonate is seen in association with persistent pulmonary hypertension, meconium aspiration, hyaline membrane disease, Group B streptococcal sepsis and diaphragmatic hernia. A sustained Alveolar-arterial gradient of  $\geq 610$  mmHg for eight consecutive hours despite optimal medical management is associated with 85% mortality.<sup>3,5</sup> Therefore, term or near term infants with reversible lung failure who sustain this gradient and who have the possibility of normal neurologic outcome are offered ECMO treatment. Infants with severe neurologic impairment, irreversible pulmonary conditions, cyanotic congenital heart disease, weigh less than 2 kg or are greater than one week of age are excluded. Most babies who qualify for ECMO require extraordi-

TABLE I  
CHARACTERISTICS OF 22 NEONATES  
UNDERGOING ECMO

Primary Diagnoses:	#	%
Respiratory Distress Syndrome/ Persistent Fetal Circulation	8	36.4
Meconium Aspiration	6	27.3
Diaphragmatic Hernia	5	22.7
Group B Strep Sepsis	2	9.1
Other: Vater's Anomalad	1	4.5
Birthweight	Mean = 3.2 kg	Range = 2.1 - 4.2 kg
Gestational Age	Mean = 38.8 weeks	Range = 35 - 42
<b>Pre-ECMO:</b>		
Peak Inspiratory Pressure	Mean = 14.5 cm H <sub>2</sub> O	
Ventilator Rate	Mean = 85.0 cycles/min.	
Mean Airway Pressure	Mean = 20.8 cm H <sub>2</sub> O	
Aa-DO <sub>2</sub> Gradient	Mean = 626 TORR	
	Range = 597 - 655 TORR	
<b>ECMO:</b>		
ECMO:	Mean = 37 hrs.	Range = 10 - 93
Age at Start		
Time on ECMO	Mean = 96 hrs.	Range = 35 - 170
<b>Post-ECMO:</b>		
Survived	n = 20	90.9%
Expired	n = 2	9.1%
*Follow up: Denver Developmental Screening Test — 95% Normal		
Physical Exam — 90% Normal		

\*One child was found to have agenesis of the corpus callosum.

narily high ventilation settings (rate 100, FiO<sub>2</sub> 1.0%, inspiratory pressures  $\geq 30$  cmH<sub>2</sub>O). Patients are also usually paralyzed and on pharmacologic agents including dopamine, dolbutamine, priscoline and antibiotics.

A neonate to be treated with ECMO is moved to a special treatment room in the NICU and the ECMO team called together. The team consists of an attending neonatologist, neonatal fellow, staff pediatric surgeon, intensive care nurse, respiratory therapist-perfusionist, and a group of experienced nurses trained to be ECMO technical specialists. Informed consent is obtained from the parents. Veno-arterial bypass is established under



# ECMO

## Extracorporeal Membrane Oxygenation

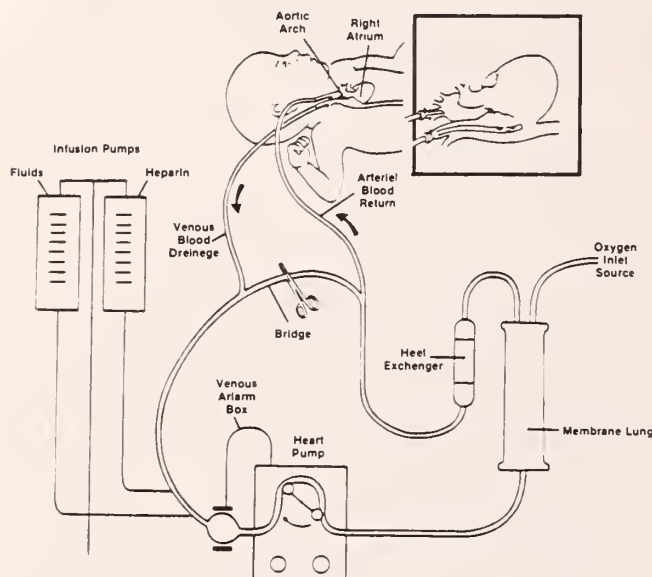


FIGURE 1

local anesthesia by cannulation of the aortic arch via the right common carotid artery and the right atrium via the right internal jugular vein (see Fig. 1). The ECMO apparatus (Fig. 1) consists of polyvinyl chloride tubing, a servo controlled venous reservoir, a roller infusion pump, the membrane oxygenator and a heat exchanger. Blood is withdrawn from the right atrium, circulated through the membrane oxygenator, warmed and returned into the aortic arch. ECMO requires that the neonate be systemically heparinized throughout the procedure and activated clotting times are measured every 15-30 min. during ECMO with appropriate adjustment of the heparin dosage. The initial ECMO bypass flow is calculated assuming a neonatal cardiac output of 120cc/kg/min. On initial ECMO flow very little blood is flowing through the heart and lung of the baby as it is all being diverted into the heart-lung apparatus. The ventilator is reduced to minimum  $\text{FiO}_2$  and pressure settings once the baby is on full flow to allow for lung rest and recovery from oxygen toxicity and barotrauma. The child is continued on IV fluids including parenteral nutrition and antibiotics, but vasopressor and paralytic agents are discontinued. The child becomes alert and awake after a short time. During the course of ECMO, frequent assessment of hemoglobin, platelets, serum electrolytes and other laboratory val-

ues, continuous monitoring of blood gas status, and minute to minute adjustment of bypass flow are required. As lung recovery takes place, the bypass flow rate is decreased until the child demonstrates that at low bypass flow rates (usually 50cc/min), and on modest ventilatory settings, oxygenation remains good. At this point, decannulation takes place and the child is returned to conventional treatment. Typically, infants are treated with ECMO for three days, but ECMO has been used for as short as a day and as long as eight days.

Complications of ECMO reported by other centers include: hemorrhagic diatheses including intracranial hemorrhage (reported in 15%), infection, thrombi, emboli, seizures, renal failure and mechanical events including leaks in the system and power failures.<sup>3,6</sup> Death in spite of ECMO, failure of resolution of the primary condition and survival with morbidity are added complications. However, it must be appreciated that these children are critical at the time of placement on ECMO and that the substrate for multiple organ injury including brain already exists.

Furthermore, ECMO achieves 80% survival in a population of neonates with a projected mortality of 85%.<sup>3,7</sup> Recent studies have indicated that while ECMO is extraordinarily complex and admittedly expensive, among survivors, lengths of stay are cut in half and total hospital bills reduced by 50%.<sup>8</sup>

Extensive in-hospital and out-patient follow-up is conducted on ECMO survivors. EEG, CT scan, brain flow study, pneumogram, and ophthalmologic consult are obtained in the hospital. Survivors are followed in a high risk infant follow-up clinic with serial physical and psychological assessment. Towne recently reported on a series of 28 survivors treated with ECMO from 1973 to 1980. She found that 72% of the infants displayed normal growth and development, and only 2/28 survivors exhibited significant disability.<sup>9</sup> Our data and similar data from other centers indicate intact survival in the majority of these high risk neonates.

ECMO appears to be an effective alternative therapeutic modality in high risk neonates with reversible cardiopulmonary failure unresponsive to conventional modes of treatment. Intact survival rates of 80% are now achievable.

### Addendum

Since preparation of this manuscript another 28 neonates have been treated with ECMO. Total institutional

experience now stands at 50 neonates treated with 46 survivors (92% survival).

**References** 1. Bartlett RH, Gazzaniga AB: Extracorporeal Circulation for Cardiopulmonary Failure. *Current Problems in Surgery* Vol. XV(5):1-96, 1978. 2. Bartlett RH, Andrews AF, Toom-Asian JM, Haiduc NJ, Gazzaniga, AB: Extracorporeal Membrane Oxygenation for Newborn Respiratory Failure: Forty-five Cases. *Surgery* 92(2):425-433, 1982. 3. Kirkpatrick BV, Krummel TM, Mueller DG, Ormazabal MA, Greenfield LJ, Salzberg AM: Use of Extracorporeal Membrane Oxygenation for Respiratory Failure in Term Infants. *Pediatrics* 72(6):872-876, 1983. 4. Bartlett RH, Roloff DW, Cornell RG, Andrews AF, Dillon PW, Zwischenberger, JB: Extracorporeal Circulation in Neonatal Respiratory Failure: A Prospective Randomized Study. *Pediatrics* 76(4):479-487, 1985. 5. Beck R, Anderson KD, Pearson GD, Cronin J, Miller MK, Short BL: Criteria for Extracorporeal Membrane Oxygenation in a Popu-

lation of Infants with Persistent Pulmonary Hypertension of the Newborn. *Journal of Pediatric Surgery* 21(4):297-302, 1986. 6. ECMO: Technical Specialist Manual 7th Edition. University of Michigan Hospital, 1984. 7. Short B, Kriesmer P, Miller M, Anderson K: Extracorporeal Membrane Oxygenation (ECMO) Versus Hyperventilation for Term Infants in Respiratory Failure. *Pediatric Research* 20(4)/2:#1679:440A, 1986. 8. Pearson GD, Short BL: An Economic Analysis of Extracorporeal Membrane (ECMO) Therapy for Term Infants in Respiratory Failure. *Pediatric Research* 20(4)/2:#1263:371A, 1986. 9. Towne BH, Lott IT, Hicks DA, Healey T: Long-Term Follow-up of Infants and Children Treated with Extracorporeal Membrane Oxygenation (ECMO): A Preliminary Report. *Journal of Pediatric Surgery* 20(4):410-411, 1985.

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# External Gastrointestinal Fistulas

## Principles of Management and Treatment

Thomas M. Bergamini, M.D. and J. David Richardson, M.D.

*External gastrointestinal fistulas continue to be a major clinical problem. The mortality rate for gastrointestinal-cutaneous fistulas ranged from 7 to 21% in collected series from 1971 to present. The most common cause of death is sepsis. Recent advances in fluid and electrolyte management, early aggressive control of infection with drainage and antibiotics, total parenteral nutrition, and the recognition of the importance in localizing and treating the underlying etiology of the fistula have significantly lowered the mortality rate over the past 20 years. The purpose of this paper is to discuss the classification, etiology, presentation, diagnosis, treatment and management of external gastrointestinal fistulas. The differences in spontaneous closure, treatment, and mortality for the various types of fistulas will be emphasized. Operative intervention is indicated early when infection is not controlled and there is a low chance for spontaneous closure. Adequate treatment of the primary disease and control of infection are the mainstay of therapy.*

The mortality rate for patients with external gastrointestinal fistulas in 1960<sup>1</sup> was 44%. In series reported since 1971, the mortality rate has ranged from 7 to 21%. This reduction is secondary to improvement in management of fluid and electrolytes, the treatment and control of infection, the prevention of skin erosion and total parenteral nutrition. The mortality rate in series for patients without nutritional supplementation was 30 to 44%<sup>1,2</sup> whereas the rate for those with supplementation ranged from 6.5 to 21%.<sup>3,4,5</sup> (Table 1) Advancements in nutritional therapy have significantly reduced the mortality rate of patients with high output fistulas from the stomach, duodenum, and small intestine; previous mortality rates ranged from 52 to 62%.<sup>1,6</sup> The most common cause of death has subsequently

TABLE 1  
TREATMENT OF EXTERNAL  
GASTROINTESTINAL FISTULAS

Reference	No. of cases	Mortality rate
Edmund (1960)	157	44.0%
Sheldon (1971)*	51	12.0%
Roback (1972)	55	30.0%
MacFayden (1973)*	61	6.5%
Aquirre (1974)*	38	21.0%

\* = treatment included parenteral nutrition

changed from fluid and electrolyte imbalance and malnutrition to sepsis.

External gastrointestinal fistulas are most frequently secondary to previous abdominal operations. Other etiologies, percentage of spontaneous closure, mortality and treatment vary with the fistula type and its location.

### Classification

A fistula is an abnormal passage between two organs of the body. The two types of fistulas are: **internal** — between two internal organs; and **external** — between an internal organ and the skin. While internal fistulas can occur between any two viscera of the body and between any organ and body cavity, external fistulas occur between the internal viscera and the skin. This paper will be a discussion of the external fistulas of the gastrointestinal tract.

External fistulas can be classified into two main categories: low output — less than 200 mL/day; and high output — greater than 200 mL/day. The amount of output is mainly related to the location of the fistulas' origin in the gastrointestinal tract. Those from the stomach, duodenum and proximal small bowel are usually high output, while those of the distal small bowel and colon are usually low output.

High output fistulas represent a much more difficult management problem than the low output because they create more severe acid/base imbalances, fluid/electrolyte losses, nutritional/vitamin deficiencies, and worse

excoriation of the skin by the gastrointestinal sections.<sup>1,2</sup>

### Etiology

In the majority of cases, the etiology of the enterocutaneous fistulas is secondary to previous abdominal operations. An estimated 2 to 10% of external gastrointestinal fistulas will occur without previous operations and are usually secondary to inflammation, malignancy, trauma, obstruction, and irradiation.<sup>2,6</sup> Most postoperative enterocutaneous fistulas are related to contributory factors such as infection, foreign body, ischemia, irradiation, cancer, distal obstruction, epithelialization of the tract, and unrecognized traumatic perforation. These fistulas arise from the stomach, duodenum, small intestine and large intestine by definition. Each of these sites has different etiologies, complications, and treatments.

Most gastric fistulas occur along the greater curvature and are low output. Technical errors, erosion of drains, and ischemia with subsequent necrosis have been postulated to be the primary etiologies of these fistulas. Direct operative trauma during splenectomy has been recognized<sup>7</sup> to occur usually from clamping the gastric wall during the clamping of the short gastric vessels. Necrosis of the gastric remnant during gastrectomy has led to gastrocutaneous fistulas. Lesser curvature fistulas have been reported with highly selective vagotomy.

There are two main types of duodenal-cutaneous fistulas: end fistulas (ie, the duodenal stump after gastric resection); and lateral fistulas (ie, after pyloroplasty or transduodenal procedure in which the duodenum is left in continuity). Most end duodenal fistulas are low output and usually close spontaneously if adequately drained; lateral duodenal fistulas are high output.

Enterocutaneous fistulas are most commonly due to previous operations, with the ileum being the most common site of all external gastrointestinal fistulas.<sup>2,6</sup> This complication may result from practically any operation on the intestines, and occasionally from an appendectomy.

Crohn's disease is the most common nonoperative cause of these fistulas. In one reported series<sup>8</sup> of 100 patients with Crohn's disease, 19% developed an enterocutaneous fistula. Other causes include cancer, trauma, irradiation, ingested foreign body, pancreatic and biliary tract disease, lymphoma, tuberculosis, syphilis, and diverticulitis.

Colocutaneous fistulas are most commonly secondary to abdominal operations. They can also result from ulcerative colitis, cancer, tuberculosis, diverticulitis, appendicitis, blunt or penetrating trauma and amebiasis. Small or large bowel fistula can result from an incarcerated hernia.

### Presentation and diagnosis

Clinically, patients with fistulas usually have fever and abdominal pain postoperatively until the fluid escapes through the incision or drain tract. A spontaneous fistula has a more indolent, progressive course with abdominal tenderness leading to skin breakdown and fistula formation.

An enterocutaneous fistula is clinically diagnosed by observation of a persistent draining tract. A fistulogram is best for confirming and locating the fistula. The gastric fistula is best diagnosed by doing an upper gastrocutaneous contrast study.<sup>7</sup> Once the fistula has been localized to a certain portion of the gastrointestinal tract, the etiology must be determined and the appropriate treatment begun.

### Treatment and Management

Since the 1960s, there have been major advances in the treatment and management of enterocutaneous fistulas with a significant reduction in morbidity and mortality. The significant advances include control of fluid and electrolytes, control of sepsis, administration of adequate nutrition, and earlier diagnosis and thus treatment of underlying etiology. In the 1960s, several reports showed mortality rates of patients with enterocutaneous fistulas to be 40-65%.<sup>1,9,10</sup> Most of these deaths were secondary to poor management of fluid and electrolytes and malnutrition. Edmunds' results<sup>1</sup> reflect these major causes of mortality by comparing the higher mortality rates of patients with high output fistulas to patients with low output fistulas. The mortality rates for these patients with gastroduodenal external fistulas, small bowel fistulas, and large bowel fistulas were 62%, 54% and 16%, respectively.

Edmunds<sup>1</sup> also emphasized the significance of nutrition by showing that a 15 to 25-pound weight loss with a total protein of 5.6 or less was associated with a mortality rate of 60%. The only survivors in this patient population were those without sepsis.

The importance of nutrition was also illustrated by Chapman.<sup>6</sup> He showed that those patients who received more than 1500 to 2000 calories per day had a mortality



rate of 16% while those who received less than 1000 calories per day had a mortality rate of 58%. In this study, enteral nutrition was used by passing a feeding tube into the intestinal tract distal to the fistula.

The value of parenteral nutrition was illustrated by two studies. In MacFayden's,<sup>1</sup> the mortality rate was 6.45% in 78 patients who received 2000 to 5000 calories per day. The mortality rate in Aquirre's<sup>3</sup> report was 21% in 38 patients who received between 2000 to 4500 calories per day.

Nutrition was reported to be effective in decreasing output of fistulas by as much as 50% upon institution of parenteral nutrition. However, this decrease in fistula output has not been a consistent finding. Aquirre<sup>3</sup> only showed a decrease in fistula output in less than one-third of the patients in his series after starting parenteral nutrition.

The value of nutrition is obvious in the patient populations that typically have had recent operations, sepsis, and a high protein loss via high output fistulas. These patients, usually in a catabolic state, may require 3000 calories or greater to maintain positive nitrogen balance and thus the integrity of the immune system and the ability to heal wounds. The choice of parenteral versus enteral nutrition is debatable. It appears that it is the principle of maintaining positive nitrogen balance and good wound healing properties by the maintenance of adequate nutrition that is important, and not the route of administration of the nutritional supplements.

Reber<sup>11</sup> did a comparative study of two adequately nourished groups who had a difference in the route of administration of nutrients. One group received only 35% of its nutrition parenterally and the rest enterally. The second group received over 90% of its nutrition parenterally. There was no significant difference in the mortality rates of the two groups. However, Fischer<sup>12</sup> favors the use of parenteral nutrition in the initial management of patients who have a marked ileus and to avoid the possible complications of high osmolarity elemental diets, namely, diarrhea and subsequent fluid and electrolyte abnormalities. Enteral feedings, however, avoids the complications of central lines, simplifies the management so it can be administered at home, and is the route of choice for long-term nutritional supplementation.

Nutrition has also been shown to increase the possibilities of spontaneous closure and decrease the time needed for closure. Halverson<sup>10</sup> reported an average time of nonoperative closure of 59 days without the use of nutrition. MacFayden<sup>1</sup> reported an average time of

34.9 days for spontaneous closure. He also pointed out that the chance for spontaneous closure is dependent upon the site of the enterocutaneous fistula. In his report, spontaneous closure occurred in 100% of duodenal fistulas; 87.5% of jejunal fistulas; 79.2% of colonic fistulas; and only 40% of ileal fistulas. This data, however, must be interpreted according to the patient population reviewed because fistulas, regardless of optimal management of fluids and electrolytes, nutrition, skin care, and control of infection, will not heal if there is distal bowel obstruction, foreign body, epithelialization of the fistula tract, and intra-abdominal infection. Only when these variables are controlled will the fistula heal. Reber<sup>11</sup> reported that over 90% of the fistulas closed within one month once infection was controlled.

Management of external fistulas has made great advances with the institution of nutrition and the control of fluid and electrolytes, however, the treatment of the etiology of external fistulas is essential. Since the institution of nutrition, the most common cause of death has been uncontrolled sepsis, secondary to the fistula or the primary disease. Reber<sup>11</sup> showed that 68% of deaths were due to sepsis and that 50% of the patients died of causes unrelated to the fistula. Thus the control of sepsis is of utmost importance in the initial care of the patient.

It is also important to determine early the etiology of the fistula. Early recognition and control of the etiology will prevent sepsis. This control is important because parenteral nutrition should not be instituted in a septic patient. Sepsis will keep the patient catabolic as well. Infection will also impair wound healing and thus closure of the fistula. It is essential to diagnose the presence of an abscess early so that definitive treatment of this and control of the sepsis can be obtained early. As previously stated, Reber<sup>11</sup> reported that over 90% of the fistulas will close within one month of the control of infection.

The role and timing of operative intervention versus continuation of nonoperative management has been debatable in certain circumstances. There is no debate when an abscess is present. The abscess should be drained immediately. Definitive surgical treatment of the fistula should not be done at the same time as the abscess drainage since this would spread infection in previously uninvolved tissue planes and may be associated with a fistula recurrence. However, once infection is controlled, there is much debate as to the timing and indications for operation. Early operative intervention may not be necessary since a good percentage of

fistulas will close spontaneously. In addition, operative intervention in a malnourished patient may be detrimental.

There are certain situations when early operative interventions may be indicated because the chance of spontaneous closure of the fistula is unlikely. These include external fistulas where there is distal obstruction, lack of gastrointestinal continuity beyond the fistula, Crohn's disease, malignancy, abdominal irradiation, and a short tract to the skin.<sup>11</sup> For patients with Crohn's disease, spontaneous closure was obtained in only 8% of the cases. Spontaneous closure for small bowel fistula after irradiation was 14%; when the length of the fistula tract was less than 2 cm, the incidence of spontaneous closure was 17%.

When to perform an operation on a fistula that is not healing by nonoperative management is also debatable. As Reber reported,<sup>11</sup> over 90% of the fistulas healed in one month after control of infection. Thus he recommends that, except for low volume distal fistulas or one that is clinically improving, operative intervention should be done if the fistula persists for one month and/or if the infection continues. Reber also reports no spontaneous closures of fistulas after three months.

The operative procedure of choice, when possible, is resectioning of the bowel segment and the fistula tract, and primary anastomosis. This is successful in 80 to 90% of reported cases. Direct suture closure of the fistulas is only successful in approximately 60% of the patients; it is not the recommended surgical procedure. For duodenal fistulas or when the fistula involves bowel that is technically not resectable, then a bypass procedure of choice is indicated.

End duodenal fistulas usually occur with a duodenal stump leak after a Billroth II. They, like gastrointestinal fistulas, are usually low output. If adequately drained, they will heal spontaneously with nonoperative treatment. In contrast, lateral duodenal fistulas have a much poorer prognosis. They are usually high output and rarely close spontaneously. Edmunds<sup>1</sup> reported a 67% mortality rate in his series in 1960. In 1981, Malangoni<sup>13</sup> reported a 7% mortality rate, which reflected the advances in management and treatment of high output fistulas.

Most lateral duodenal fistulas will require operative closure. Ten of the 14 patients reported by Malangoni<sup>13</sup> required surgical intervention for closure of the fistula. Proposed procedures include tube decompression, resection of the fistulous tract and bowel and end-to-end anastomosis, Roux-en-Y jejunal serosal patch, and

TABLE 2  
STRATEGY OF TREATMENT OF EXTERNAL  
GASTROINTESTINAL FISTULAS

Priorities	Treatment
Initial	<ul style="list-style-type: none"> <li>—restore blood volume; begin correction of fluid and electrolyte imbalance.</li> <li>—drain surgically accessible abscesses; supplement control of sepsis with appropriate antibiotics.</li> <li>—control fistula; protect skin; collect and measure volume and electrolyte losses.</li> </ul>
Second (up to two days)	<ul style="list-style-type: none"> <li>—continue correction of electrolyte imbalance</li> <li>—replace ongoing fluid and electrolyte losses</li> <li>—intravenous hyperalimentation</li> </ul>
Third (up to five days)	<ul style="list-style-type: none"> <li>—institute alimentary feedings with: feeding tube through fistula; nasogastric feeding tube directed past fistula; feeding jejunal stoma if necessary; supplemental oral feedings if the fistula is located distally.</li> <li>—delineate the anatomy of all fistulas by: roentgenograms of upper part of gastrointestinal tract and small intestine; barium enema examination; fistulogram if possible.</li> </ul>
Fourth (after five days)	<ul style="list-style-type: none"> <li>—maintain adequate caloric intake</li> <li>—operate to control sepsis</li> <li>—resect or totally bypass fistula if it fails to close</li> </ul>

pancreaticoduodenectomy. The Roux-en-Y jejunal patch is the preferred treatment<sup>13,14</sup> if one-half to two-thirds of the duodenal wall circumference is intact. If less than one-half of the duodenal wall circumference is intact then a Roux-en-Y jejunal end-to-end or end-to-side anastomosis is recommended to prevent the development of duodenal stenosis.<sup>14</sup>

A strategy of treatment of external gastrointestinal fistulas, based on the principles of management and treatment, has been outlined in a report by Sheldon, Gardiner, Way et al<sup>5</sup> and is shown in Table 2.

## Conclusion

The treatment of external gastrointestinal fistulas has made great advances in the past 20 years. The mortality rate has decreased from 40-65% to 7-21%. Critical factors in this success have been the emphasis on fluid and electrolyte management, nutrition and the control of sepsis. Identifying the type of fistula and its location are keys in determining the best treatment. The initial treatment must be placed on identifying the etiology of the fistula. Other significant facts associated with a lower mortality rate are early drainage of the abscess and control of the primary disease. Operative interven-



## EXTERNAL GASTROINTESTINAL FISTULAS—Bergamini and Richardson

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tion may be indicated early for those fistulas associated with etiologies not likely to close spontaneously, like radiation enteritis, Crohn's disease, and lateral duodenal fistulas. Operation is indicated for high output fistulas and good management with control of the infections that are not improving after one month.

**References** 1. Edmunds L, Williams G, Welch C: External fistulas arising from the gastrointestinal tract. *Ann Surg* 152:445-471, 1960. 2. Roback S, Demetre M: High output enterocutaneous fistulas of the small bowel. *Am J Surg* 123:317-322, 1972. 3. Aquirre A, Fisher J, Welch C: The role of surgery and hyperalimentation in therapy of gastrointestinal cutaneous fistulas. *Ann Surg* 180:393-401, 1974. 4. MacFayden B, Dadrick S, Ruberg R: Management of gastrointestinal fistulas with parenteral hyperalimentation. *Surgery* 74:100-105, 1973. 5. Sheldon G, Gardiner B, Way L, et al: Management of gastrointestinal fistulas. *Surg Gynecol Obstet* 133:385-389, 1971. 6. Chapman R, Foran R, Dunphy J: Management of intestinal fistulas. *Am J Surg* 108:157-164, 1964. 7.

Pearlstein L, Jones C, Polk HC Jr: Gastrocutaneous fistula. Etiology and treatment. *Ann Surg* 187:223-226, 1978. 8. Eade M, Covice W, Williams J: Clinical and hematologic features of Crohn's disease. *Surg Gynecol Obstet* 134:643-646, 1972. 9. Bowlin J, Hardy S, Conn S: External alimentary fistulas: analysis of 75 cases with notes on management. *Am J Surg* 103:6-14, 1962. 10. Halverson R, Nogle H, Richards R: Gastric and small bowel fistulas. *Am J Surg* 118:968-972, 1969. 11. Reber H, Roberts C, Way L, et al: Management of external gastrointestinal fistulas. *Ann Surg* 188:460-467, 1978. 12. Fischer J: The management of high output intestinal fistulas. In Longmire WP (ed), *Advances in Surgery*, vol. IX, Chicago, Year Book Medical Publishers, 1975, pp. 139-176. 13. Malangoni M, Madura J, Joseph J: Management of lateral duodenal fistulas: a study of fourteen cases. *Surgery* 90:645-651, 1981. 14. Wolfman E, Treuino G, Heaps D, et al: An operative technique for the management of acute and chronic lateral duodenal fistula. *Ann Surg* 159:563-569, 1964.

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# “Sudden Infant Death” Associated with Hypohidrotic Ectodermal Dysplasia

MARK L. BERNSTEIN, D.D.S. AND BARBARA WEAKLEY-JONES, M.D.

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*Hypohidrotic ectodermal dysplasia is a genetic condition that is potentially fatal in early childhood and may mimic typical sudden infant death. Careful observation of subtle clinical findings can differentiate the two conditions at autopsy, but more importantly can prevent fatalities. A report of a fatal case is presented.*

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## Case Report

A 14-month-old male child was found dead in his crib. Sometime earlier he had been put down for a nap after play, placed in bedclothes and covered. There was no history of vomiting or convulsions.

The family physician stated that the child was premature and noted him to have thin skin. He had been treated with amoxicillin for ear infections and bronchitis. Delayed tooth eruption was noted by the child's pediatrician, however no particular syndrome was suspected.

## Autopsy findings

There were few significant gross abnormalities, and no anatomic cause of death was determined. Positive findings included the presence of sparse blond scalp hair and eyelashes. The eyebrows were absent. Mild periocular pigmentation was seen (Fig. 1). Cyanosis of the nail beds was pronounced. There were no erupted teeth. Histologic findings included focal atelectasis and acute pulmonary congestion. Sections of the skin showed absence of any sweat glands or pilosebaceous structures (Fig. 2). A lateral skull radiograph showed the presence of three unerupted developing maxillary teeth and complete absence of mandibular teeth or tooth buds (Fig. 3).



Fig. 1

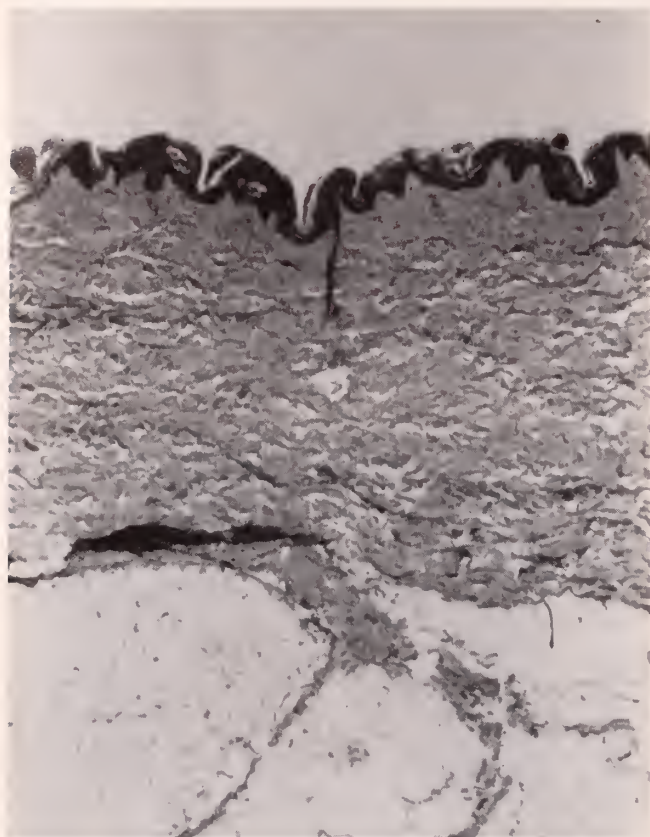
A diagnosis of anhidrotic (hypohidrotic) ectodermal dysplasia was made and the cause of death was speculated to be related to this syndrome.

## Description

Hypohidrotic ectodermal dysplasia (HED) is a genetically determined congenital syndrome featuring prominent hypohidrosis, hypotrichosis and hypodontia.<sup>1-3</sup> These and a multitude of other signs and symptoms reflect a defect of structures derived from ectoderm.<sup>4</sup>

The characteristically soft, thin, hypopigmented skin of affected individuals shows reduced and defective ad-





**Fig. 2**

nexal structures.<sup>2-4</sup> Head hair is scant, blond and stiff while eyelashes and eyebrows are reduced or absent.<sup>2,4</sup> Sebaceous glands are not present, resulting in dry skin.<sup>5</sup> The nails are usually normal.<sup>2</sup> The most serious adnexal deficiency is the nearly complete absence of eccrine sweat glands.<sup>1</sup> This results in potentially life-threatening hyperthermia<sup>3,6</sup> associated with warm weather, minimal exertion, infection or eating.<sup>2,4,6,7</sup>



**Fig. 3**

The teeth (oral ectodermal derivatives) are completely absent (anodontia) or few in number (hypodontia) and when present usually show conical or peg-shaped crowns.<sup>2,4</sup>

There is a characteristic facial appearance manifested by frontal bossing combined with a depressed nasal bridge, rendering a dishpan appearance to the face.<sup>2,4</sup> Fine wrinkles and pigmentation around the mouth and eyes are often present at birth.<sup>2</sup>

Reduction in the number of glands of the mucous membranes renders these patients susceptible to rhinitis, ear and respiratory tract infections<sup>2,3</sup> while aplastic or hypoplastic lacrimal glands predispose to xerophthalmia and conjunctivitis.<sup>2</sup> Xerostomia, due to absence of minor oral mucosal salivary glands is occasionally reported.<sup>2,1</sup> Asthma associated with atopy is also described.<sup>2</sup>

### **Genetics**

The most common and classic form of the condition is inherited as an x-linked recessive trait and has been called the Christ-Siemens-Touraine syndrome.<sup>8</sup> The full-blown phenotypic expression is almost exclusively seen in males although the vast majority of female carriers will show mild symptoms such as hypodontia, conical teeth, hypotrichosis and reduction in the number of sweat glands.<sup>2,4</sup> A rare autosomal recessive variant has been documented in which homozygotes show findings identical to the x-linked type<sup>9</sup> and heterozygotes may exhibit diminished sweat pore counts.<sup>10</sup> One such kindred, featuring three affected girls born to clinically normal parents has been reported in Kentucky.<sup>9,10</sup>

### **Diagnosis and Differential Diagnosis in the Neonate**

Affected infants may appear normal at birth accounting for the fact that only five of 275 cases were diagnosed during the neonatal period.<sup>11</sup> This is because the characteristic facies may not be obvious until after the second year.<sup>1</sup> Also, since teeth normally begin to erupt between the ages of two to three months, dental defects may be overlooked in neonates. The earliest clues of HED are fever of unknown origin<sup>2,4,7</sup> in an infant (usually male) having scant blond hair, missing eyebrows or eyelashes. Careful observation and history after such suspicious findings may then reveal thin, dry skin, eczema, rhinitis, conjunctivitis, bronchitis or asthma. Perioral or periocular pigmentation with fine pseudorhagades may be present. The child may not form tears when he cries. If HED is suspected in a neonate, jaw

radiographs provide a simple way to disclose the characteristic dental findings not determinable by clinical exam. Examination of family members may show other affected siblings while heterozygote mothers (of x-linked HED) may show missing/conical teeth.<sup>2,4,14</sup> Confirmation of the diagnosis is established through sweat pore counts and/or palmar skin biopsy in a compatible child. Sweat pores are completely or nearly completely absent in the hemizygote male with x-linked HED while carrier mothers often show reduced counts with an uneven distribution of pores reflecting mosaicism (Lyon effect).<sup>10,15</sup> Although too few cases have been studied on which to draw conclusions, homozygotes of the autosomal recessive form show 50% reduction in the number of sweat pores and marked hypoplasia of those present. Corresponding heterozygotes also show a 50% reduction in sweat pores, but those present are anatomically normal.<sup>10</sup>

The differential diagnosis includes several related syndromes as well as unrelated diseases sharing some of the major features of HED. Technically, the term ectodermal dysplasia is not a single disease but a convenient classification of a heterogeneous group of congenital, developmental conditions having in common diffuse and nonprogressive defects of epidermis and at least one of the appendages.<sup>16</sup> Of the more than 100 "ectodermal dysplasia syndromes"<sup>17</sup> some are hypohidrotic and may be considered in the differential diagnosis. These syndromes, too rare to discuss in detail, can be differentiated from typical HED through their varied inheritance patterns, deviations of the classic features<sup>18,19</sup> and the additions of such manifestations as cleft lip/palate,<sup>20-22</sup> fusion of eyelids,<sup>23</sup> finger/toe deformities,<sup>21,22</sup> or hypothyroidism<sup>24</sup> not seen in HED.

Congenital syphilis shares several features of HED such as frontal bossing, saddle nose and dental deformities. The luetic screwdriver-shaped Hutchinson's incisors may simulate the conical crowns of ectodermal dysplasia.<sup>2</sup> Syphilitic perioral rhagades, in contrast to the fine labial wrinkling of HED, are true scars.<sup>2</sup> The presence of normal cutaneous appendages and positive seriology for syphilis would serve to differentiate the conditions.

The rare syndrome of familial dysautonomia type II features anhidrosis with severe pyrexia and decreased lacrimation. This condition is easily distinguished from ectodermal dysplasia as sweat glands are present although nonfunctional.<sup>25</sup>

### Management

Most important is the prevention of hyperthermia which can lead to brain damage and death. This is particularly crucial in the infant who can not control his environment.<sup>11,26</sup> Avoidance of both high ambient temperatures and warm clothing is obvious. Even the most minimal physical exercise can cause pyrexia resulting in tachycardia and hyperventilation which, in turn, aggravates hyperthermia.<sup>27</sup> This positive feedback can be rapidly life-threatening.<sup>6</sup> Cold towels are recommended to reduce core temperature when needed.<sup>27</sup> Adults with HED can regulate themselves and cautiously engage in physical exercise.<sup>27</sup>

Dentures placed at a young age are suitable to restore cosmetic, speech and chewing functions. Wigs, too, are a cosmetic consideration.

Artificial tears are useful for those patients with xerophthalmia<sup>2</sup> and Xerolube® or Salivart® are salivary supplements for dry mouth.

Treatment is also required for those patients with dry, eczematous skin, repeated nasal, otologic and upper respiratory tract infections and asthma.

Genetic counseling is indicated after determination of the inheritance pattern.

### Summary

A substantial number of infants and children with undiagnosed hypohidrotic ectodermal dysplasia die from hyperthermia.<sup>2,6,7,12,13</sup> This is largely preventable if the syndrome is detected through recognition of the dental and cutaneous appendage abnormalities that accompany the FUO for which the infant may be initially evaluated.

A simple checklist is provided.

1. Complaint — fever of unknown origin
2. Physical examination — absent or scanty blond hair; absent or conical teeth; thin, dry hypopigmented skin
3. Diagnosis — dental radiographs; sweat pore count or function; skin biopsy; evaluation of family
4. Management — prevention of pyrexia; dentures; wig; treatment of respiratory difficulties, eczema, xerostomia, xerophthalmia as needed; genetic counseling

**References** 1. Gorlin RJ, Old T, Anderson VE: Hypohidrotic ectodermal dysplasia in females: a critical analysis and argument for genetic heterogeneity. *Z. Kinderheilkd* 108:1-11, 1970. 2. Reed WB, Lopez DA, Landing B: Clinical spectrum of anhidrotic ectodermal dysplasia. *Arch Dermatol* 102:134-143, 1970. 3. Smith



## **HYPOHIDROTIC ECTODERMAL DYSPLASIA—Bernstein and Weakley-Jones**

DW: Recognizable patterns of human malformation (ed.3). WB Saunders Co, Philadelphia, 1982. **4.** Gorlin RJ, Pindborg, JJ, Cohen MM: Syndromes of the head and neck (ed.2). McGraw-Hill Book Company, New York, 1976. **5.** Katz SI, Penneys NS: Sebaceous gland papules in anhidrotic ectodermal dysplasia. *Arch Dermatol* 103:507-509, 1971. **6.** Salisbury DM, Strothers JK: Hypohidrotic ectodermal dysplasia and sudden infant death. *Lancet* 1:153-154, 1981. **7.** Lambert WC, Bilinski DL: Diagnostic pitfalls in anhidrotic ectodermal dysplasia: indications for palmar skin biopsy. *Cutis* 31:182-187, 1983. **8.** Freire-Maia N: Ectodermal dysplasias. *Hum Hered* 21:309-312, 1971. **9.** Bartlett RC, Eversole LR, Adkins RS: Autosomal recessive hypohidrotic ectodermal dysplasia: dental manifestations. *Oral Surg* 39:71-86, 1975. **10.** Passarge E, Fried E: Autosomal recessive hypohidrotic ectodermal dysplasia with subclinical manifestations in the heterozygote. *Birth Defect* 13(3C):95-100, 1977. **11.** Estrada R, et al: Anhidrotic ectodermal dysplasia: fever in a neonate. *NY State J Med* 81:1791-1793, 1981. **12.** Bernstein R, Hatchuel I, Jenkins T: Hypohidrotic ectodermal dysplasia and sudden infant death syndrome. *Lancet* 2:1024, 1980. **13.** Zaia J: Illusive fever in the newborn. *Clin Pediat* 10:744-745, 1971. **14.** Sofaer JA: A dental approach to carrier screening in x-linked hypohidrotic ectodermal dysplasia. *J Med Genet* 18:459-460, 1981. **15.** Kleinbrecht J, et al: Sweat pore counts in ectodermal dysplasia. *Hum Genet* 57:437-439, 1981. **16.** Solomon LM, Keuer EJ: The ectodermal dysplasias: problems of classification and some newer syndromes. *Arch Dermatol* 116:1295-1299, 1980. **17.** Pinheiro M, Freire-Maia N: Dermodontodysplasia: an eleven member, four generation pedigree with an apparently hitherto undes-

cribed pure ectodermal dysplasia. *Clin Gent* 24:58-68, 1983. **18.** Witkop CJ, Brearley LJ, Gentry WC: Hypoplastic enamel, onycholysis, and hypohidrosis inherited as an autosomal dominant trait: a review of ectodermal dysplasia syndromes. *Oral Surg* 39:71-86, 1975. **19.** Mahloudji M, Livingston KE: Familial and congenital simple anhidrosis. *Am J Dis Child* 113:477-479, 1967. **20.** Rapp RS, Hodgkin WE: Anhidrotic ectodermal dysplasia: autosomal dominant inheritance with palate and lip anomalies. *J Med Genet* 5:269-272, 1968. **21.** Roselli D, Gulienetti R: Ectodermal dysplasia. *Br J Plastic Surg* 14:190-204, 1961. **22.** Rudiger RA, Hasse W, Passarge E: Association of ectrodactyly, ectodermal dysplasia and cleft lip-palate: The EEC syndrome. *Am J Dis Child* 120:160-163, 1970. **23.** Hay RJ, Wells RS: The syndrome of ankylobelpharon, ectodermal defects, and cleft lip and palate: an autosomal dominant condition. *Brit J Dermatol* 94:277, 1976. **24.** Pabst HF, Growth O, McCoy EE: Hypohidrotic ectodermal dysplasia with hypothyroidism. *J Pediat* 98:223-227, 1981. **25.** Pinsky L, DiGeorge AM: Congenital familial sensory neuropathy with anhidrosis. *J Pediat* 68:1-13, 1966. **26.** Ramchander V, et al: Anhidrotic ectodermal dysplasia in an infant presenting with pyrexia of unknown origin. *Clin Pediat* 17:51-54, 1978. **27.** Rietschel RL: Anhidrotic ectodermal dysplasia and heat loss: management. *Int J Dermatol* 18:370-371, 1979.

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I would like to take this opportunity to thank each of you for caring enough to belong to our organization. Your membership alone is a symbol of the loyalty and support much needed today in our world of medicine.

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A special thanks to all officers and committee chairmen for your support throughout the year.

I shall look forward to seeing each of you at convention.

**Phyllis Cronin**  
**AKMA President**

### Calendar of Events:

#### (Monday, April 20 (EST))

- 11:00 a.m. 2:00 p.m. - Registration - Presidents Suite  
Committee Meetings & Hospitality -  
President's Suite
- 11:00 a.m. Finance Committee
- 12:00 noon Planning Committee
- 1:00 p.m. Open Session - President available
- 2:00 p.m. Membership Committee
- 3:00 p.m. Executive Committee
- 7:00 p.m. Dinner Honoring Board - Cash Bar  
Lafayette Club - 1500 First Security Plaza
- 8:30 p.m. Pre-Convention Board Meeting - Lafayette Club

#### Tuesday, April 21

- 7:30 a.m. Continental Breakfast - President's Suite
- 8:00 a.m. Registration - Atrium Level  
Exhibits Set-Up, Ballroom I - Atrium Level
- 9:00 a.m. House of Delegates - Ballroom I - Atrium Level
- 1:00 a.m. Luncheon and Auction to Benefit The Ronald  
McDonald Houses of Kentucky - Ballroom II  
- Atrium Level
- 3:00 p.m. Tour of the Bluegrass Ronald McDonald House

- 5:30 p.m. Boyd County Reception Honoring AKMA  
President-Elect Pam Potter (Mrs. Roger), Board  
of Directors 1987-88 Potter Suite
- 7:00 p.m. Dinner Honoring AKMA Past Presidents,  
Officers, 1986-87  
Ballroom II - Atrium Level  
Installation of Officers  
Program ?

#### Wednesday, April 22

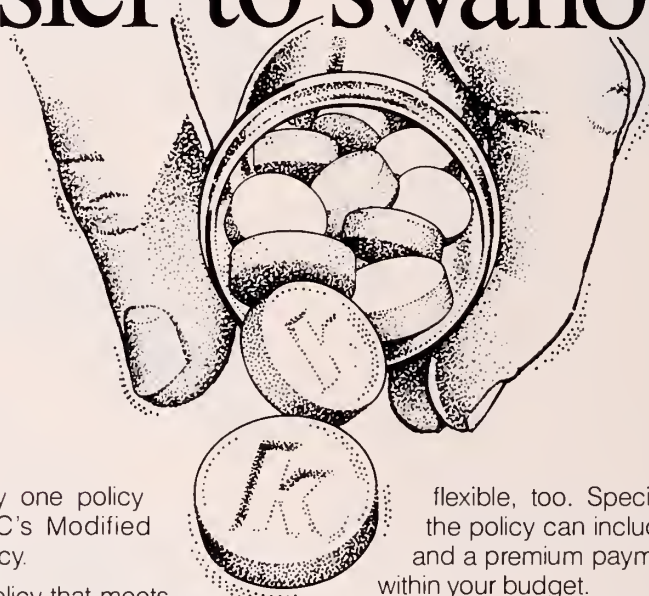
- 8:00 a.m. Post Convention Breakfast for 1987-88 Board  
Abraham Lincoln Room - Atrium Level
- 9:00 a.m. Post Convention Board Meeting - Abraham  
Lincoln Room

#### Hospitality Suite Hours

- 10:00 a.m. to 6:00 p.m. - Monday, April 20
- 7:30 a.m. to 8:45 a.m. - Tuesday, April 21
- Hospitality Suite (President's Suite) will open each evening  
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A woman with dark hair, wearing a bright orange long-sleeved shirt and dark trousers, sits alone at a white metal table in a cafe. She is looking down with a somber expression. The cafe has many similar empty tables and chairs, creating a sense of isolation. The background is a dark, textured wall.

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## Brief Summary

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The severity of disease is variable depending upon the immune status of the patient, the frequency and duration of episodes, and the degree of cutaneous or systemic involvement. These factors should determine patient management, which may include symptomatic support and counseling only, or the institution of specific therapy. The physical, emotional and psychosocial difficulties posed by herpes infections as well as the degree of debilitation, particularly in immunocompromised patients, are unique for each patient, and the physician should determine therapeutic alternatives based on his or her understanding of the individual patient's needs. Thus Zovirax Capsules are not appropriate in treating all genital herpes infections. The following guidelines may be useful in weighing the benefit/risk considerations in specific disease categories:

**First Episodes** (primary and nonprimary infections — commonly known as initial genital herpes):

Double-blind, placebo-controlled studies have demonstrated that orally administered Zovirax significantly reduced the duration of acute infection (detection of virus in lesions by tissue culture) and lesion healing. The duration of pain and new lesion formation was decreased in some patient groups. The promptness of initiation of therapy and/or the patient's prior exposure to Herpes simplex virus may influence the degree of benefit from therapy. Patients with mild disease may derive less benefit than those with more severe episodes. In patients with extremely severe episodes, in which prostration, central nervous system involvement, urinary retention or inability to take oral medication require hospitalization and more aggressive management, therapy may be best initiated with intravenous Zovirax.

## Recurrent Episodes:

Double-blind, placebo-controlled studies in patients with frequent recurrences (6 or more episodes per year) have shown that Zovirax Capsules given for 4 to 6 months prevented or reduced the frequency and/or severity of recurrences in greater than 95% of patients. Clinical recurrences were prevented in 40 to 75% of patients. Some patients experienced increased severity of the first episode following cessation of therapy; the severity of subsequent episodes and the effect on the natural history of the disease are still under study.

The safety and efficacy of orally administered acyclovir in the suppression of frequent episodes of genital herpes have been established only for up to 6 months. Chronic suppressive therapy is most appropriate when, in the judgement of the physician, the benefits of such a regimen outweigh known or potential adverse effects. In general, Zovirax Capsules should not be used for the suppression of recurrent disease in mildly affected patients. Unanswered questions concerning the human relevance of *in vitro* mutagenicity studies and reproductive toxicity studies in animals given very high doses of acyclovir for short periods (see Carcinogenesis, Mutagenesis, Impairment of Fertility) should be borne in mind when designing long-term management for individual patients. Discussion of these issues with patients will provide them the opportunity to weigh the potential for toxicity against the severity of their disease. Thus, this regimen should be considered only for appropriate patients and only for six months until the results of ongoing studies allow a more precise evaluation of the benefit/risk assessment of prolonged therapy.

Limited studies have shown that there are certain patients for whom intermittent short-term treatment of recurrent episodes is effective. This

approach may be more appropriate than a suppressive regimen in patients with infrequent recurrences.

Immunocompromised patients with recurrent herpes infections can be treated with either intermittent or chronic suppressive therapy. Clinically significant resistance, although rare, is more likely to be seen with prolonged or repeated therapy in severely immunocompromised patients with active lesions.

**CONTRAINDICATIONS:** Zovirax Capsules are contraindicated for patients who develop hypersensitivity or intolerance to the components of the formulation.

**WARNINGS:** Zovirax Capsules are intended for oral ingestion only.

**PRECAUTIONS: General:** Zovirax has caused decreased spermatogenesis at high doses in some animals and mutagenesis in some acute studies at high concentrations of drug (see PRECAUTIONS — Carcinogenesis, Mutagenesis, Impairment of Fertility). The recommended dosage and length of treatment should not be exceeded (see DOSAGE AND ADMINISTRATION).

Exposure of Herpes simplex isolates to acyclovir *in vitro* can lead to the emergence of less sensitive viruses. The possibility of the appearance of less sensitive viruses in man must be borne in mind when treating patients. The relationship between the *in vitro* sensitivity of Herpes simplex virus to acyclovir and clinical response to therapy has yet to be established.

Because of the possibility that less sensitive virus may be selected in patients who are receiving acyclovir, all patients should be advised to take particular care to avoid potential transmission of virus if active lesions are present while they are on therapy. In severely immunocompromised patients, the physician should be aware that prolonged or repeated courses of acyclovir may result in selection of resistant viruses which may not fully respond to continued acyclovir therapy.

**Drug Interactions:** Co-administration of probenecid with intravenous acyclovir has been shown to increase the mean half-life and the area under the concentration-time curve. Urinary excretion and renal clearance were correspondingly reduced.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Acyclovir was tested in lifetime bioassays in rats and mice at single daily doses of 50, 150 and 450 mg/kg given by gavage. There was no statistically significant difference in the incidence of tumors between treated and control animals, nor did acyclovir shorten the latency of tumors. In 2 *in vitro* cell transformation assays, used to provide preliminary assessment of potential oncogenicity in advance of these more definitive life-time bioassays in rodents, conflicting results were obtained. Acyclovir was positive at the highest dose used in one system and the resulting morphologically transformed cells formed tumors when inoculated into immunosuppressed, syngeneic, weanling mice. Acyclovir was negative in another transformation system considered less sensitive.

In acute studies, there was an increase, not statistically significant, in the incidence of chromosomal damage at maximum tolerated parenteral doses of 100 mg/kg acyclovir in rats but not Chinese hamsters; higher doses of 500 and 1000 mg/kg were clastogenic in Chinese hamsters. In addition, no activity was found after 5 days dosing in a dominant lethal study in mice. In 6 of 11 microbial and mammalian cell assays, no evidence of mutagenicity was observed. At 3 loci in a Chinese hamster ovary cell line, the results were inconclusive. In 2 mammalian cell assays (human lymphocytes and L5178Y mouse lymphoma cells *in vitro*), positive responses for mutagenicity and chromosomal damage occurred, but only at concentrations at least 400 times the acyclovir plasma levels achieved in man.

Acyclovir has not been shown to impair fertility or reproduction in mice (450 mg/kg/day, p.o.) or in rats (25 mg/kg/day, s.c.). At 50 mg/kg/day s.c. in the rat, there was a statistically significant increase in post-implantation loss, but no concomitant decrease in litter size. In female rabbits treated subcutaneously with acyclovir subsequent to mating, there was a statistically significant decrease in implantation efficiency but no concomitant decrease in litter size at a dose of 50 mg/kg/day. No effect upon implantation efficiency was observed when the same dose was administered intravenously. In a rat peri- and postnatal study at 50 mg/kg/day s.c., there was a statistically significant decrease in the group mean numbers of corpora lutea, total implantation sites and live fetuses in the F<sub>1</sub> generation. Although not statistically significant,

there was also a dose related decrease in group mean numbers of live fetuses and implantation sites at 12.5 mg/kg/day and 25 mg/kg/day, s.c. The intravenous administration of 100 mg/kg/day, a dose known to cause obstructive nephropathy in rabbits, caused a significant increase in fetal resorptions and a corresponding decrease in litter size. However, at a maximum tolerated intravenous dose of 50 mg/kg/day in rabbits, there were no drug-related reproductive effects.

Intraperitoneal doses of 320 or 80 mg/kg/day acyclovir given to rats for 1 and 6 months, respectively, caused testicular atrophy. Testicular atrophy was persistent through the 4-week post-dose recovery phase after 320 mg/kg/day; some evidence of recovery of sperm production was evident 30 days postdose. Intravenous doses of 100 and 200 mg/kg/day acyclovir given to dogs for 31 days caused aspermatogenesis. Testicles were normal in dogs given 50 mg/kg/day, i.v. for one month.

**Pregnancy: Teratogenic Effects:** Pregnancy Category C. Acyclovir was not teratogenic in the mouse (450 mg/kg/day, p.o.), rat (50 mg/kg/day, s.c.) or rabbit (50 mg/kg/day, s.c. and i.v.). There are no adequate and well-controlled studies in pregnant women. Acyclovir should not be used during pregnancy unless the potential benefit justifies the potential risk to the fetus. Although acyclovir was not teratogenic in animal studies, the drug's potential for causing chromosome breaks at high concentration should be taken into consideration in making this determination.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Zovirax is administered to a nursing woman. In nursing mothers, consideration should be given to not using acyclovir treatment or discontinuing breastfeeding.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS — Short-Term Administration:** The most frequent adverse reactions reported during clinical trials were nausea and/or vomiting in 8 of 298 patient treatments (2.7%) and headache in 2 of 298 (0.6%). Less frequent adverse reactions, each of which occurred in 1 of 298 patient treatments (0.3%), included diarrhea, dizziness, anorexia, fatigue, edema, skin rash, leg pain, inguinal adenopathy, medication taste and sore throat.

**Long-Term Administration:** The most frequent adverse reactions reported in studies of daily therapy for 3 to 6 months were headache in 33 of 251 patients (13.1%), diarrhea in 22 of 251 (8.8%), nausea and/or vomiting in 20 of 251 (8.0%), vertigo in 9 of 251 (3.6%), and arthralgia in 9 of 251 (3.6%). Less frequent adverse reactions, each of which occurred in less than 3% of the 251 patients (see number of patients in parentheses), included skin rash (7), insomnia (4), fatigue (7), fever (4), palpitations (1), sore throat (2), superficial thrombophlebitis (1), muscle cramps (2), pars planitis (1), menstrual abnormality (4), acne (3), lymphadenopathy (2), irritability (1), accelerated hair loss (1), and depression (1).

**DOSAGE AND ADMINISTRATION: Treatment of initial genital herpes:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 10 days (total 50 capsules).

**Chronic suppressive therapy for recurrent disease:** One 200 mg capsule 3 times daily for up to 6 months. Some patients may require more drug, up to one 200 mg capsule 5 times daily for up to 6 months.

**Intermittent Therapy:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 5 days (total 25 capsules). Therapy should be initiated at the earliest sign or symptom (prodrome) of recurrence.

**Patients With Acute or Chronic Renal Impairment:** One 200 mg capsule every 12 hours is recommended for patients with creatinine clearance  $\leq 10$  ml/min/1.73 m<sup>2</sup>.

**HOW SUPPLIED:** Zovirax Capsules (blue, opaque) containing 200 mg acyclovir and printed with "Wellcome ZOVIRAX 200". Bottles of 100 (NDC-0081-0991-55) and unit dose pack of 100 (NDC-0081-0991-56).

Store at 15°-30°C (59°-86°F) and protect from light.

\*In controlled studies, recurrences were totally prevented for 4 to 6 months in up to 75% of patients.



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"Free door prizes!" "Grand opening: Register to win watches, TVs, VCRs!" "Effective immediately - services at reduced rates - offer expires December 31!" "We offer services never before available in the community."

Sales jingles for opening day at the newest discount outlet? **No.** Physician advertisements, each one!

Now, I understand it is all quite **legal** now. . .but what happened to the interest of the patient? How does this enhance the integrity of the medical profession? Are we to believe that the patients' best interests are being served by soliciting surgery in trade for door prizes? Willingness to sign up for a free watch was never an indication for surgery in my training.

There are many things served by supporting our radio and television stations, newspapers and magazines, but the best interest of the patient is not likely to be on the list. Sure, medical education may be provided to the public through media sources, but these self-serving enticements are a far cry from "public service announcements." Just because it's legal doesn't mean it's right.

What greater treasure have physicians to protect than each patient's **Right to Trust**. . .that the patient's best interest is the sacred core of every medical decision. . .that every attempt will be made by physicians and the greater science and art of medicine to determine and provide, to the best of our ability, that which is best for the patient. Advertising extremes such as those cited here may eventually erode that fundamental right of patients which is the core of the successful patient-physician relationship.

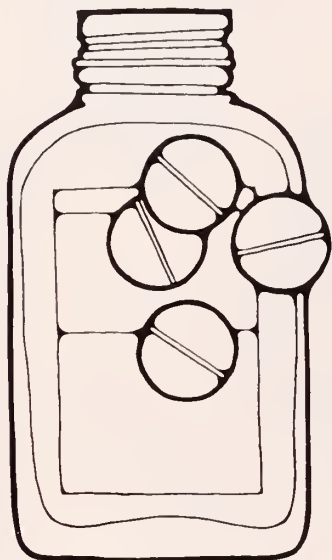
We must safeguard our profession from these erosive elements. What's next? "Get your appendix out here: We'll get 'em while they're hot! Fifty percent off if they're not!" Or how about "Plop, plop, fizz, fizz oh what a relief **my** treatment is!"

One thing for sure - the public is not likely to be fooled for long. Fads may come and go, trends may rise and fall, but people have an uncanny ability to see through it all. Conscientious medical care will survive. . .after all. . ."It's the **Real Thing!**"

Martha Keeney Heyburn, M.D.



# Revised Policy Regarding Amphetamine Regulation Violations



The "amphetamine regulation" (201 KAR 9:016, Restrictions on Use of Amphetamines and Amphetamine-like Anorectic Controlled Substances.) became law December 2, 1983, and according to collected data the regulation has been effective in controlling the abuse and diversion of these substances. Prior to the adoption of the regulation in 1983, Kentucky ranked high in a national survey (20th in per capita consumption) but was 40th in 1985.

According to the administrative laws of the Commonwealth of Kentucky, the Kentucky Board of Medical Licensure (KBML) is required to enforce the regulation and in so doing established a policy (17 July 1986) regarding violations.

Unfortunately letters originally sent by the KBML to physician violators were not specifically informative about the nature of the violation and many physicians objected to the language of the letter and the fine imposed. For these reasons KBML established a revised policy at its meeting December 18, 1986.

According to the revised policy the first violation of the amphetamine regulation by a physician will result in that physician receiving a certified letter delineating the specific nature of the violation, the date of the violation and a warning that a repeat violation will result in a fine of \$300.

The second and repeated violations of the amphetamine regulation, according to the revised policy, will result in the physician receiving another certified letter that will delineate the nature and dates of the previous and subsequent violations, impose a fine of \$300, and offer a hearing if the physician does not choose to pay the fine.

It is the hope of KBML that compliance with the regulation will decrease further the abuse and diversion of amphetamines and amphetamine like drugs and that the public's health and safety will be preserved. Here is the complete regulation as revised January 12, 1987.

**John S. Llewellyn, M.D.**

# Finance and Administration Cabinet

## Kentucky State Board of Medical Licensure

### 201 KAR 9:016. Restrictions on Use of Amphetamine and Amphetamine-Like Anorectic Controlled Substances.

RELATES TO: KRS 311.530 TO 311.620

PURSUANT TO: KRS Chapter 13A

NECESSITY AND FUNCTION: KRS 311.597 empowers the State Board of Medical Licensure to determine those acts that shall constitute dishonorable, unethical or unprofessional conduct of a character likely to deceive, defraud or harm the public or any member thereof by a licensee. In accordance therewith, the purpose of this regulation is to regulate and control the use of amphetamine and amphetamine-like anorectic controlled substances.

Section 1. A physician shall not prescribe, order, dispense, administer, supply, sell or give any amphetamine or amphetamine-like anorectic controlled substance designated as Schedule II pursuant to KRS 218A.070 or by duly promulgated regulation without taking into account the drug's potential for abuse, the possibility the drug may lead to dependence, the possibility the patient will obtain the drug for a non-therapeutic use or distribute to others

and the presence of an illicit market for the drug. The patient's record and the prescription order shall indicate the specific diagnosis/purpose for which the drug is being given. Such diagnosis/purpose shall be restricted to:

- a. the treatment of narcolepsy;
- b. the treatment of hyperkinesia;
- c. the treatment of drug-induced brain dysfunction;
- d. the treatment of epilepsy;
- e. the differential diagnostic psychiatric evaluation of depression;
- f. the treatment of depression shown to be refractory to other therapeutic modalities; and
- g. the treatment of attention deficit disorder; and
- h. the clinical investigation of the effects of such drugs or compounds in which case an investigative protocol therefore shall have been submitted to, reviewed and approved by the Board before such investigation has begun.

Section 2. Amphetamine means all Schedule III controlled substances in this group, including, but not limited to, dextroamphetamine and methamphetamine. Amphetamine-like means all Schedule II controlled substances with pharmacologic activity similar to the prototype drugs of the amphetamine class, including, but not limited to, phenmetrazine and methylphenidate.

Section 3. Amphetamine and amphetamine-like controlled substances shall not be prescribed, ordered, dispensed, administered, supplied, sold or given except as provided in this regulation. A departure from this regulation shall constitute dishonorable, unethical or unprofessional conduct of a character likely to deceive, defraud or harm the public or a member thereof.

Section 4. For legitimate medical purposes, a physician may apply in writing for a written waiver of any of these requirements. The Board may issue such waivers with terms and conditions it deems appropriate.



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We're proud to announce the introduction of Extracorporeal Shock Wave Lithotripsy as a new feature of our kidney stone treatment program. This new device makes it possible to pulverize and eliminate kidney stones without invasive surgery. Now you have the opportunity to participate in this state-of-the-art procedure at CAMC's High Tech Center here in Charleston, West Virginia.

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As you can imagine, Lithotripsy offers many benefits to kidney stone patients. The process is less painful, entails fewer side effects, and recuperation is quicker than with conventional surgery. It's even less expensive than surgery.

We're encouraging all area urologists to apply for privileges in Extracorporeal Shock Wave Lithotripsy. We invite you to visit CAMC and see the lithotripter in action. Come and learn about this revolutionary therapy. We will happily provide you with a brochure for your use as well as brochures for your patients.

For your brochures or other information about Lithotripsy and our kidney stone treatment program, call CAMC: in West Virginia at 1-800-654-0159; from out of state, call 304-340-7315.

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Steven B. Leichter, M.D., Course Director, will lead an international faculty of physicians associated with World Health Organization Collaborating Centres in Diabetes. Countries represented will include Australia, Finland, West Germany and Sweden.

Issues to be addressed include new standards in diabetes team care, use of new oral agents, exercise to improve diabetes control and developing the primary practice of diabetes care.

For registration information, please contact Ruth Wood, Kentucky Diabetes Foundation, 120 North Eagle Creek Drive, Lexington, Kentucky 40509. Telephone (606) 268-3034.

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## A Sign of the Times?

In 1983, 22 physician-owned professional liability insurance companies were forced to raise their premiums an average of 17 percent. At that rate, high-risk insurance coverage that cost \$63,000 in 1983 could top \$300,000 in just ten years.

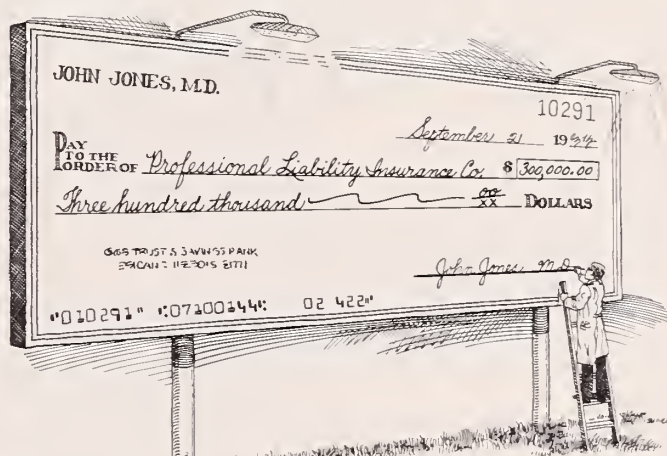
These costs are leading to an affordability crisis which affects everyone. Physicians are concerned about rising premiums, exorbitant awards and continued insurance availability. Patients pay the price in increased costs and limited access to care.

Liability problems exact a high toll on physicians—in time and money, and even on their health. Some have been

forced into early retirement; others have modified their practices to avoid high-risk procedures.

There is help. The American Medical Association's Special Task Force on Professional Liability and Insurance has developed an ambitious plan of action to respond to the crisis. This includes reviewing tort reform, working with the nation's policymakers to address the issue, promoting state coalitions to deal with the problem, distributing patient information materials and instructing physicians on how to avoid lawsuits.

If you want something done about the professional liability problem, become part of the solution: join the AMA.



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# Application for Scientific Exhibits

1987 Annual Meeting

Kentucky Medical Association

Ramada Inn East—Bluegrass Convention Center

Louisville, Kentucky

September 15-17

1. Title of exhibit \_\_\_\_\_
2. Name(s) of exhibitor(s) \_\_\_\_\_  
Address \_\_\_\_\_  
Professional title \_\_\_\_\_
3. Institution if other than exhibitor \_\_\_\_\_
4. Amount of backwall footage required \_\_\_\_\_  
(The draped booth has 4' side walls. This footage should not be included in backwall footage required.)  
TABLE DESIRED? \_\_\_\_\_ (Table 2' deep X width of backwall (footage) Electrical outlet desired \_\_\_\_\_
5. Will summary printed matter be available or obtainable for the interested physician? \_\_\_\_\_
6. Indicate sources of assistance provided to you in connection with this exhibit \_\_\_\_\_  
\_\_\_\_\_
7. Has this exhibit been displayed before? If so, when & where? \_\_\_\_\_  
\_\_\_\_\_
8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date \_\_\_\_\_

Signature of Applicant \_\_\_\_\_

Fill Out and Mail to:

**RICHARD A. KIELAR, M.D., Chairman**  
Scientific Exhibits Committee  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 1, 1987

- KMA provides, without cost to the exhibitor, one 2 ft. Table, bracket lights and a title sign.
- Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the George E. Fern Company, 328 Louisville Air Park, Louisville, Kentucky 40213.
- *Commercial* exhibit materials and handouts are prohibited in the Scientific Exhibit area.
- Transportation and erection costs are the responsibility of the exhibitor.
- Exhibit *must be attended* during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.
- Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.
- Exhibit must be dismantled and removed by 4:00 P.M., Thursday, September 17, 1987.
- Exhibit space is *strictly limited to footage and space allotted*. No exhibit may extend into the aisle.

Ramada Inn East—Bluegrass Convention Center and the Kentucky Medical Association or its agents cannot guarantee against loss or damage and will assume no liability for damages nor guarantee the exhibitor against loss of any kind. The exhibitor agrees, with the Association, to be responsible to the Ramada Inn East—Bluegrass Convention Center for damages that may occur as a result of the exhibitor's use of the facility.

## ACCREDITATION

KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category I credit.

Before prescribing, see complete prescribing information in SK&F CO. literature or PDR. The following is a brief summary.

**\* WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum  $K^+$  levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict  $K^+$  intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

**Precautions:** The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

**Supplied:** 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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## Effective control time and time again<sup>1</sup>

Effective control of fasting and postprandial glucose—patient after patient, meal after meal, year after year.

## Insulin when it's needed

Insulin levels are rapidly elevated in response to a meal, then return promptly to basal levels after the meal challenge subsides.

## Timed to minimize risks

Rapidly metabolized and excreted, with an excellent safety profile.<sup>1</sup> As with all sulfonylureas, hypoglycemia may occur.

In concert with diet in non-insulin-dependent diabetes mellitus

**Glucotrol<sup>®</sup>**  
(glipizide) 5-mg and 10-mg  
Scored Tablets



**SYNCHRONIZED  
SULFONYLUREA THERAPY**

*Please see brief summary of Glucotrol<sup>®</sup> (glipizide) prescribing information on next page.*

**ROERIG**   
A Division of Pfizer Pharm  
New York, New York 10017



#### Reference:

1. Sachs R, Frank M, Fishman SK. Overview of clinical experience with glipizide. In *Glipizide: A Worldwide Review*. Princeton, NJ: Excerpta Medica, 1984. pp 163-172.

#### GLUCOTROL® (glipizide) Tablets

##### Brief Summary of Prescribing Information

**INDICATIONS AND USAGE:** GLUCOTROL is indicated as an adjunct to diet for the control of hyperglycemia in patients with non-insulin-dependent diabetes mellitus (NIDDM, type II) after an adequate trial of dietary therapy has proved unsatisfactory.

**CONTRAINDICATIONS:** GLUCOTROL is contraindicated in patients with known hypersensitivity to the drug or with diabetic ketoacidosis, with or without coma, which should be treated with insulin.

**SPECIAL WARNING ON INCREASED RISK OF CARDIOVASCULAR MORTALITY:** The administration of oral hypoglycemic drugs has been reported to be associated with increased cardiovascular mortality as compared to treatment with diet alone or diet plus insulin. This warning is based on the study conducted by the University Group Diabetes Program (UGDP), a long-term prospective clinical trial designed to evaluate the effectiveness of glucose-lowering drugs in preventing or delaying vascular complications in patients with non-insulin-dependent diabetes. The study involved 823 patients who were randomly assigned to one of four treatment groups (Diablos, 19, supp. 2:747-830, 1970).

UGDP reported that patients treated for 5 to 8 years with diet plus a fixed dose of tolbutamide (1.5 grams per day) had a rate of cardiovascular mortality approximately 2-1/2 times that of patients treated with diet alone. A significant increase in total mortality was not observed, but the use of tolbutamide was discontinued based on the increase in cardiovascular mortality, thus limiting the opportunity for the study to show an increase in overall mortality. Despite controversy regarding the interpretation of these results, the findings of the UGDP study provide an adequate basis for this warning. The patient should be informed of the potential risks and advantages of GLUCOTROL and of alternative modes of therapy.

Although only one drug in the sulfonylurea class (tolbutamide) was included in this study, it is prudent from a safety standpoint to consider that this warning may also apply to other oral hypoglycemic drugs in this class, in view of their close similarities in mode of action and chemical structure.

**PRECAUTIONS: Renal and Hepatic Disease:** The metabolism and excretion of GLUCOTROL may be slowed in patients with impaired renal and/or hepatic function. Hypoglycemia may be prolonged in such patients should it occur.

**Hypoglycemia:** All sulfonylureas are capable of producing severe hypoglycemia. Proper patient selection, dosage, and instructions are important to avoid hypoglycemia. Renal or hepatic insufficiency may increase the risk of hypoglycemic reactions. Elderly, debilitated or malnourished patients and those with adrenal or pituitary insufficiency are particularly susceptible to the hypoglycemic action of glucose-lowering drugs. Hypoglycemia may be difficult to recognize in the elderly or people taking beta-adrenergic blocking drugs. Hypoglycemia is more likely to occur when caloric intake is deficient, after severe or prolonged exercise, when alcohol is ingested, or when more than one glucose-lowering drug is used.

**Loss of Control of Blood Glucose:** A loss of control may occur in diabetic patients exposed to stress such as fever, trauma, infection or surgery. It may then be necessary to discontinue GLUCOTROL and administer insulin.

**Laboratory Tests:** Blood and urine glucose should be monitored periodically. Measurement of glycosylated hemoglobin may be useful.

**Information for Patients:** Patients should be informed of the potential risks and advantages of GLUCOTROL, of alternative modes of therapy, as well as the importance of adhering to dietary instructions, of a regular exercise program, and of regular testing of urine and/or blood glucose. The risks of hypoglycemia, its symptoms and treatment, and conditions that predispose to its development should be explained to patients and responsible family members. Primary and secondary failure should also be explained.

**Drug Interactions:** The hypoglycemic action of sulfonylureas may be potentiated by certain drugs including non-steroidal anti-inflammatory agents and other drugs that are highly protein bound, salicylates, sulfonamides, chloramphenicol, probenecid, coumarins, monoamine oxidase inhibitors, and beta adrenergic blocking agents. *In vitro* studies indicate that GLUCOTROL binds differently than tolbutamide and does not interact with salicylate or dicumarol. However, caution must be exercised in extrapolating these findings to a clinical situation. Certain drugs tend to produce hyperglycemia and may lead to loss of control, including the thiazides and other diuretics, corticosteroids, phenothiazines, thyroid products, estrogens, oral contraceptives, phenytoin, nicotinic acid, sympathomimetics, calcium channel blocking drugs, and isoniazid. A potential interaction between oral miconazole and oral hypoglycemic agents leading to severe hypoglycemia has been reported. Whether this interaction also occurs with the intravenous, topical, or vaginal preparations of miconazole is not known.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** A 20-month study in rats and an 18-month study in mice at doses up to 75 times the maximum human dose revealed no evidence of drug-related carcinogenicity. Bacterial and *in vivo* mutagenicity tests were uniformly negative. Studies in rats of both sexes at doses up to 75 times the human dose showed no effects on fertility.

**Pregnancy:** Pregnancy Category C. GLUCOTROL (glipizide) was found to be mildly fetotoxic in rat reproductive studies at all dose levels (5-50 mg/kg). This fetotoxicity has been similarly noted with other sulfonylureas, such as tolbutamide and tolazamide. The effect is perinatal and believed to be directly related to the pharmacologic (hypoglycemic) action of GLUCOTROL. In studies in rats and rabbits no teratogenic effects were found. There are no adequate and well controlled studies in pregnant women. GLUCOTROL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Because recent information suggests that abnormal blood glucose levels during pregnancy are associated with a higher incidence of congenital abnormalities, many experts recommend that insulin be used during pregnancy to maintain blood glucose levels as close to normal as possible.

**Nonteratogenic Effects:** Prolonged severe hypoglycemia has been reported in neonates born to mothers who were receiving a sulfonylurea drug at the time of delivery. This has been reported more frequently with the use of agents with prolonged half-lives. GLUCOTROL should be discontinued at least one month before the expected delivery date.

**Nursing Mothers:** Since some sulfonylurea drugs are known to be excreted in human milk, insulin therapy should be considered if nursing is to be continued.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:** In controlled studies, the frequency of serious adverse reactions reported was very low. Of 702 patients, 11.8% reported adverse reactions and in only 1.5% was GLUCOTROL discontinued.

**Hypoglycemia:** See PRECAUTIONS and OVERDOSAGE sections.

**Gastrointestinal:** Gastrointestinal disturbances, the most common, were reported with the following approximate incidence: nausea and diarrhea, one in 70; constipation and gastralgia, one in 100. They appear to be dose-related and may disappear on division or reduction of dosage. Cholestatic jaundice may occur rarely with sulfonylureas. GLUCOTROL should be discontinued if this occurs.

**Dermatologic:** Allergic skin reactions including erythema, morbilliform or maculopapular eruptions, urticaria, pruritus, and eczema have been reported in about one in 70 patients. These may be transient and may disappear despite continued use of GLUCOTROL. If skin reactions persist, the drug should be discontinued. Porphyria cutanea tarda and photosensitivity reactions have been reported with sulfonylureas.

**Hematologic:** Leukopenia, agranulocytosis, thrombocytopenia, hemolytic anemia, aplastic anemia, and pancytopenia have been reported with sulfonylureas.

**Metabolic:** Hepatic porphyria and disulfiram-like alcohol reactions have been reported with sulfonylureas. Clinical experience to date has shown that GLUCOTROL has an extremely low incidence of disulfiram-like reactions.

**Endocrine Reactions:** Cases of hyponatremia and the syndrome of inappropriate antidiuretic hormone (SIADH) secretion have been reported with this and other sulfonylureas.

**Miscellaneous:** Dizziness, drowsiness, and headache have been reported in about one in fifty patients treated with GLUCOTROL. They are usually transient and seldom require discontinuance of therapy.

**OVERDOSAGE:** Overdosage of sulfonylureas including GLUCOTROL can produce hypoglycemia. If hypoglycemic coma is diagnosed or suspected, the patient should be given a rapid intravenous injection of concentrated (50%) glucose solution. This should be followed by a continuous infusion of a more dilute (10%) glucose solution at a rate that will maintain the blood glucose at a level above 100 mg/dL. Patients should be closely monitored for a minimum of 24 to 48 hours since hypoglycemia may recur after apparent clinical recovery. Clearance of GLUCOTROL from plasma would be prolonged in persons with liver disease. Because of the extensive protein binding of GLUCOTROL (glipizide), dialysis is unlikely to be of benefit.

**DOSE AND ADMINISTRATION:** There is no fixed dosage regimen for the management of diabetes mellitus with GLUCOTROL. In general, it should be given approximately 30 minutes before a meal to achieve the greatest reduction in postprandial hyperglycemia.

**Initial Dose:** The recommended starting dose is 5 mg before breakfast. Geriatric patients or those with liver disease may be started on 2.5 mg. Dosage adjustments should ordinarily be in increments of 2.5-5 mg, as determined by blood glucose response. At least several days should elapse between titration steps.

**Maximum Dose:** The maximum recommended total daily dose is 40 mg.

**Maintenance:** Some patients may be effectively controlled on a once-a-day regimen, while others show better response with divided dosing. Total daily doses above 15 mg should ordinarily be divided.

**HOW SUPPLIED:** GLUCOTROL is available as white, dye-free, scored diamond-shaped tablets imprinted as follows: 5 mg tablet—Pfizer 411 (NDC 5 mg 0049-4110-66) Bottles of 100; 10 mg tablet—Pfizer 412 (NDC 10 mg 0049-4120-65) Bottles of 100.

**CAUTION:** Federal law prohibits dispensing without prescription.

More detailed professional information available on request.

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# PLI Committee Plans Extensive PR Campaign

The ad hoc committee on Professional Liability Insurance (PLI) met January 22, to discuss the selection of two public relations firms. Wenz-Neely, of Louisville, will be the primary firm to coordinate activities dealing with the public side of the campaign. The Preston Group, of Lexington, will be dealing with the political side.

Part of the campaign plan is to encourage KMA physicians to take an active part in informing other physicians of the steps involved in solving the problem. A slide show has been developed for individual doctors to take to physician groups. A packet of information for one-on-one contact with legislators will be developed, and a speakers bureau will be established to reach the public.

Chairman of the Committee Wally O. Montgomery, M.D., Paducah, noted that by June 1 KMA plans to have completed approximately 30 meetings with the top echelon of the General Assembly. These will be structured meetings with Senate and House leadership, Chairmen and key committee members.



Professional Liability Insurance Committee members



Committee members Richard F. Hench, M.D., (L) KMA President and Albert H. Joslin, M.D., Second District Trustee.



Committee Chairman Wally O. Montgomery, M.D.



# AMPAC & KEMPAC Host Political Seminar



Political Consultant Michael E. Dunn

Thirty-six physicians and spouses attended a day-long workshop covering topics on politics in the eighties and the citizens role in policymaking. Political consultant Michael E. Dunn conducted the seminar and emphasized the importance of constituent involvement in politics. Dunn is a former political science instructor at the University of Arkansas and director of government relations services for the Public Affairs Council in Washington, D.C.

In his presentation, Dunn stated that the medical profession must develop new tactics to deal with politics and those tactics involve understanding the strategies of political policymaking. One of the strategies with real impact, according to Dunn, is belonging to KEMPAC and AMPAC. Because of the expense involved in campaigning, political candidates receive a small percent of each dollar from individual contributions while a much larger share of contributions from



From left to right: Mrs. Richard F. Hench (Barbara), Lexington; Mrs. Harold L. Bushey (Eulene), Barbourville; Mrs. John R. Potter (Pam), Ashland; AKMA President, Mrs. John D. Cronin (Phyllis), Lexington, and Joe F. Arterberry, M.D., Louisville

## ASSOCIATION

PACs is used directly for candidate support.

A highlight of the seminar was the Campaign Management simulation where participants, working in groups, planned campaign strategy to elect their candidate. Members of the winning group were: Mrs. Richard F. Hensch (Barbara), Lexington; Mrs. Harold L. Bushey (Eulene), Barbourville; Mrs. John R. Potter (Pam), Ashland; AKMA President, Mrs. John D. Cronin (Phyllis), Lexington and Joe F. Arterberry, M.D., Louisville.

Guest speakers during the seminar included Randolph D. Smoak, M.D., Member of the AMPAC Board of Directors and State Representative Tom Burch.



**Randolph D. Smoak, M.D., Member  
AMPAC Board of Directors.**



**Harold L. Bushey, M.D., Chairman of  
KEMPAC**



**William B. Monnig, M.D., Eighth Dis-  
trict Trustee**



## Rep. Burch is KEMPAC Guest Speaker

*The following presentation was made at a February 25 meeting organized by KEMPAC to increase political involvement. We thought you might be interested in Representative Burch's comments.*



Representative Tom Burch

Representative Tom Burch (D), Louisville, is Chairman of the Kentucky House of Representatives Health and Welfare Committee. Representative Burch has been in the forefront of legislation to increase organ donors and has sponsored numerous legislation in that regard.

- 1974 sponsored a bill which required the Kentucky Department of Transportation to include on driver's license cards language indicating the intent of the motor vehicle operator to donate any or all of his or her body and allowed any person to execute an anatomical gift by signing the preprinted language on the back of the motor vehicle operator's license.

- 1980 sponsored legislation to make corneas and corneal tissue more available to sight disabled persons by allowing coroners, medical examiners or qualified designees to provide or authorize the removal of the cornea or corneal tissue by a qualified physician under certain circumstances.

- 1986 sponsored legislation requiring each hospital to establish an organ procurement for transplant protocol which will encourage organ donation and identify potential organ tissue by a qualified physician under certain circumstances.

- Burch was a major force in the adoption of Kentucky's Brain Death or Definition of Death legislation.

Representative Burch has served in the Kentucky General Assembly since 1971 and is a graduate of Belknap College.

### Health Legislation Anticipated in 1988

Thank you for inviting me to share with you my predictions about health issues that may be raised in the 1988 session of the General Assembly.

Your former KMA president, Doctor Wally Montgomery, wrote an editorial in the 1986 April *KMA Journal* calling for greater physician awareness and involvement in the legislative process. I agree with him. Unless legislators hear the views of all sides on an issue, it is extremely difficult to pass good legislation recognizing all aspects of a problem and dealing with them appropriately. Meetings like this are good steps toward increasing your knowledge of the issues legislators confront and improving my understanding of your concerns and your ideas for good solutions.

You may have heard the old saying, "When the General Assembly meets, no man's liberty or pocketbook is safe." From my perspective as Chairman of the Health and Welfare Committee, sometimes that adage seems all too close to the truth. During the last session, almost 400 bills were introduced which related to health or welfare. Given that opportunity, you might be relieved to know we actually only passed 83 of them. It is not surprising that so much legislation was proposed last session. Health and welfare issues are important. They affect, in one way or another, every citizen in the state. The members of the legislature have been made painfully aware of the many problems which plague these large social systems. Since we're here to discuss health, let me share with you some of the information that is of greatest concern to us.

In Kentucky, the Medicaid Program cost \$26 million in 1966. For Fiscal Year 1987, the projected cost is an alarming **\$625** million. What began as a four service program (physician, hospital, dental and pharmacy benefits) has now grown to a 23 service program. While there are approximately 671,000 poor Kentuckians, the Medicaid Program covers only a little more than half. Within that group, the long-term care population (comprising only 4% of all Medicaid recipients) consumes 40% of the current expenditures of the Medicaid program. To focus briefly on expenditures for another Med-

## ASSOCIATION

icaid service, from 1980 to 1985 the cost of the Medicaid out-patient drug formulary (a closed formulary) increased from \$14.3 million to \$31.6 million, a 120% increase. During the same five-year time period, the cost of the Medicaid in-patient drug formulary increased from \$75.4 million to \$146.7 million, a 95% increase.

The proportion of our citizens who depend on the state to finance their health care is growing at an alarming rate. Consider these facts about the senior adult group:

- The latest projections of the U.S. Census Bureau estimate by the year 2050, 21.7% of the population is likely to be over 65, up from the present 11.4%. The percent of persons 85 or older will grow from 1% to 5.2%;
- The University of Louisville Urban Studies Center has predicted the percentage of the older persons in Kentucky will rise from the current 11.8% of the population to 14% by the end of this century. The Center also predicts a 157% increase in persons age 85 years and older, an age group which relies on **institutional long-term care** an extremely costly health care delivery system.

Although the 1980 General Assembly enacted Senate Concurrent Resolution 23, supporting the Kentucky Hospital Association driven "voluntary effort" at achieving health care cost containment, by 1984 Kentucky hospitals reportedly had \$331 million in uncompensated care, a one year growth rate of over 12%.

Knowing over one-half of Kentuckians are not covered by Medicaid or private health insurance reinforces a gloomy economic forecast for hospitals and other primary care practitioners. I believe I am safe in predicting that health services for the medically indigent will receive a great deal of attention from the General Assembly in 1988.

You may recall a major effort was mounted in the 1986 session to address these and other issues affecting the health care system through House Bill 403 and Senate Bill 62 which you may have heard called the "Omnibus Health Care Reform Act." Although certain provisions of these bills were enacted, neither bill passed intact. But because of the scope of the problems toward which they were directed, I feel certain that similar issues will be raised in 1988. Some provisions of the bill that were enacted are the dual licensure of hospital beds and pre-screening of nursing home applicants.

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### **"Knowing over one-half of Kentuckians are not covered by Medicaid or private health insurance reinforces a gloomy economic forecast for hospitals and other primary care practitioners."**

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It has been estimated that over 230,000 low-income Kentuckians have annual incomes **below \$5,250** and are not covered by public or private health financing systems. The Kentucky unemployment rate **continues** to hover around 10%, indicating that the number of people who are "unemployed and uninsured" is a significant factor. Additionally, almost 89% of Kentucky businesses employ fewer than 20 persons. These small companies rarely offer health insurance as an employment benefit. Therefore, approximately 266,500 Kentuckians and their families fall into the category of "working-uninsured." Heightened competition, altered federal reimbursement policies and shrinking federal and state health budgets have aggravated the dilemma of the poor and uninsured. Those without health insurance — approximately one American in 10 often have no access to care. In addition, growing cost consciousness is forcing hospitals to reassess past commitments to serve patients who cannot pay.

The elements that did not pass and I believe will be considered again are:

1. Creating new sources of revenue to finance health care for the medically indigent;
2. Formalizing the shared provider responsibility for uncompensated health care costs. For example, the previous bills would have required licensed hospitals to annually provide indigent care in an amount totaling no less than 3% of total gross patient revenue. Hospitals failing to provide the 3% would have been required to pay an assessment to the Kentucky Health Care Assistance Trust Fund. Deposited funds would have been used to reimburse any hospital providing indigent care in excess of 3%;
3. Providing some fiscal relief to acute care institutional providers by means of some type of catastrophic health insurance proposal;
4. Fostering incentives for family responsibility for



health care costs perhaps by mandating co-payments by Medicaid recipients, authorizing liens on personal property of Medicaid recipients, or allowing voluntary contributions for Medicaid reimbursed long-term care residents;

5. Continuing support for the development of non-institutional providers;
6. Fueling competitive market forces and strengthening the role of the government as prudent purchaser of health care services by requiring competitive bidding for any Medicaid service and/or directing a single agency to act as a prudent purchaser of all health expenditures financed directly or indirectly with general funds;
7. **Finding** a constitutional means of dealing with the crisis in medical malpractice insurance. With respect to this particular problem, be assured that I am aware of the growing magnitude of the issue and most concerned with the search for an **equitable** and legal solution. Of course, we will carefully review proposals submitted by the Ken-

- Foster and provide for the monitoring of quality of care offered by alternative delivery systems, such as health maintenance organizations and preferred provider organizations;
- Explore mixing and matching of various revenues to fund adequate health care for the uninsured;
- Educate the consumer about the cost of and quality of health care received; and
- Demonstrate the concern of the Legislature with the growing problem of AIDS. The Interim Joint Committee on Health and Welfare had one session dealing exclusively with the problem in December and a second session in February. While we have not developed our position regarding public education, treatment of victims and/or limiting the spread of the disease, I am confident legislation pertaining to these issues will be proposed in 1988.

Throughout 1987 we will have subcommittees reviewing the problems I have mentioned and considering alternative solutions. One of the Subcommittees will focus on current health issues including the medically

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**“I predict that you will see legislation introduced dealing with fueling competitive market forces and strengthening the role of the government as prudent purchaser of health care services by requiring competitive bidding for any Medicaid service and/or directing a single agency to act as a prudent purchaser of all health expenditures financed directly or indirectly with general funds . . .”**

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tucky Medical Association as well as the recommendations of the Insurance Liability Task Force which has been meeting monthly since last September to study the serious insurance liability problems facing Kentucky and other states.

Finally, I predict that you will see legislation introduced which at a minimum will:

- Enhance efforts by the government to act as a “prudent purchaser” of health care services;

indigent; another will deal with health care and cost problems confronting the elderly; and a third will work on improving children's protection and care services. We welcome your input to these meetings and will disseminate information about meeting dates and topics shortly.

Again, I thank you for this opportunity to discuss the past and future activities of the General Assembly with you. I hope this occasion is only one part of an ongoing exchange of ideas and information.

# Physician Broadcasters and Spokespeople



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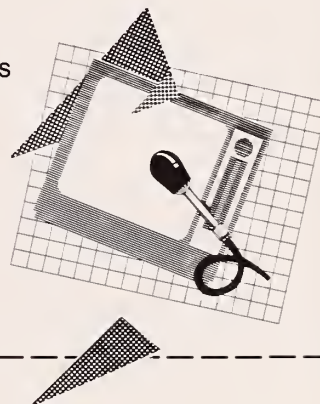
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Friday & Saturday, June 5 & 6  
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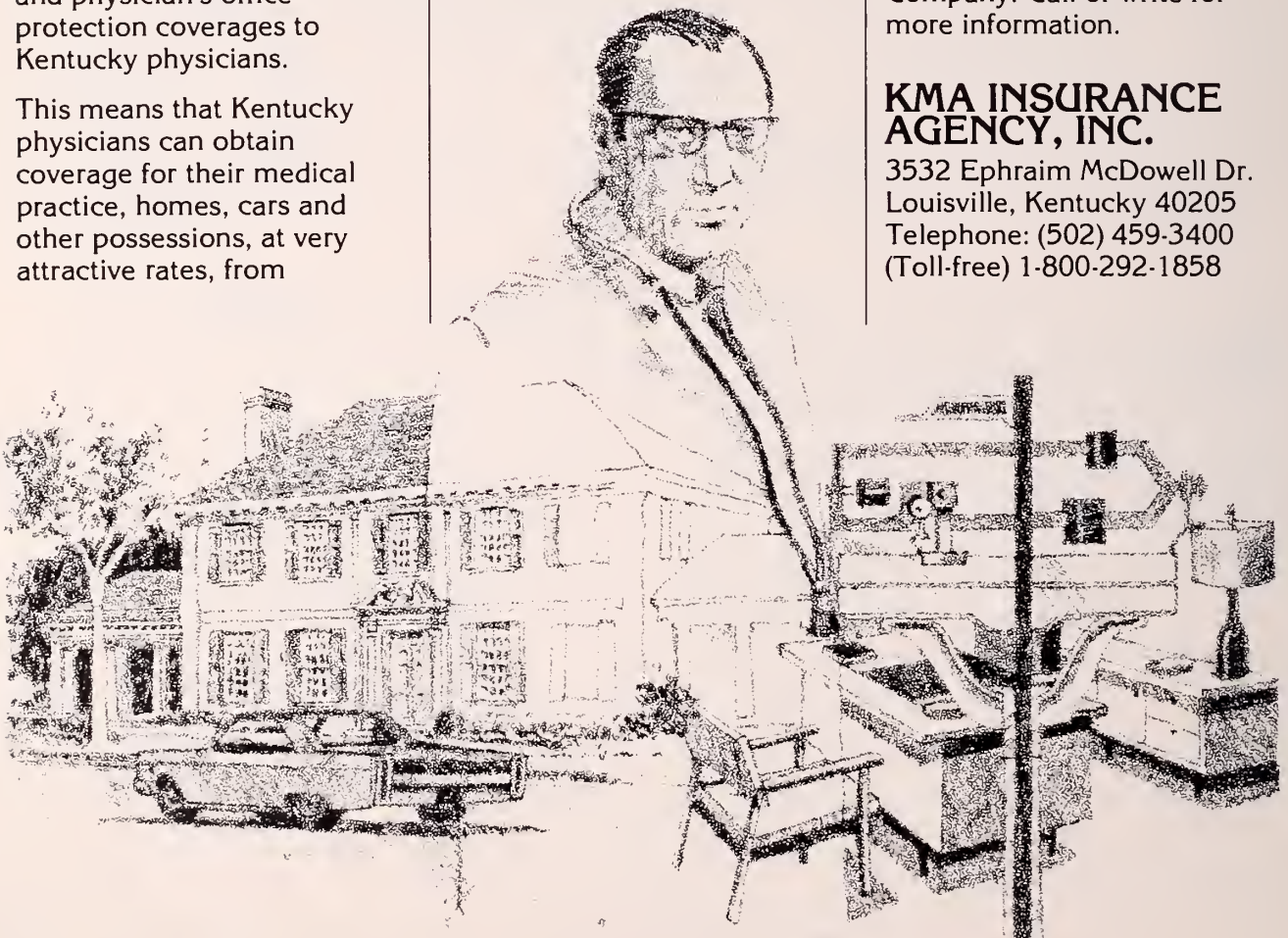
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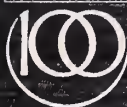


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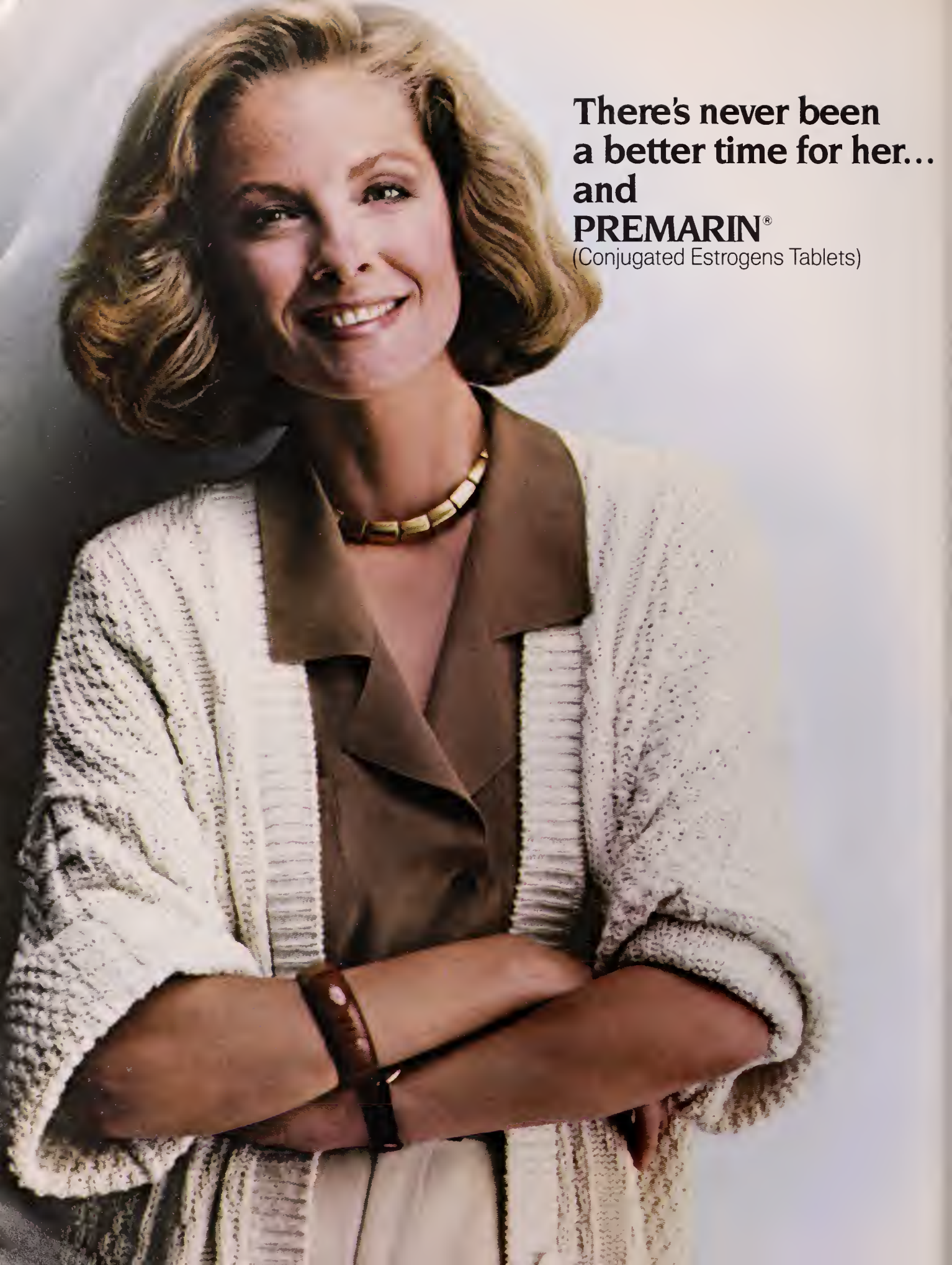
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For moderate-to-severe  
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### 1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

### 2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

**DESCRIPTION:** PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares urine. It contains estrone, equilin, and 17 $\alpha$ -dihydroequilin, together with smaller amounts of 17 $\alpha$ -estradiol, equilin, and 17 $\alpha$ -dihydroequilin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

**INDICATIONS AND USAGE:** PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe vasomotor symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) Osteoporosis (abnormally low bone mass). Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

**Concomitant Progestin Use:** The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

**CONTRAINDICATIONS:** Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy. (See Boxed Warning.) 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

**WARNINGS:** Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

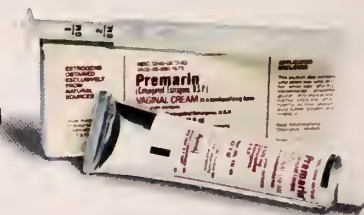
Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement, it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with

For atrophic vaginitis

## PREMARIN® (Conjugated Estrogens)

Vaginal  
Cream

0.625mg/g



caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

**PRECAUTIONS:** Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

- Increased sulfobromophthalen retention
  - Increased prothrombin and factors VII, VIII, IX, and X, decreased antithrombin 3; increased norepinephrine-induced platelet aggregability
  - Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered
  - Impaired glucose tolerance
  - Decreased pregnandiol excretion
  - Reduced response to metyrapone test
  - Reduced serum folate concentration
  - Increased serum triglyceride and phospholipid concentration
- As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

**ADVERSE REACTIONS:** The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow, dysmenorrhea; premenstrual-like syndrome, amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion, cystitis-like syndrome, tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating, cholestatic jaundice, chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum, hemorrhagic eruption; loss of scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea, increase or decrease in weight, reduced carbohydrate tolerance, aggravation of porphyria, edema, changes in libido.

**ACUTE OVERDOSSAGE:** May cause nausea, and withdrawal bleeding may occur in females.

### DOSSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. Given cyclically for short-term use only. For treatment of moderate to severe vasomotor symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 2.5 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. Given cyclically. Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three- to six-month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

### References:

- Whitehead MI, Townsend PT, Pryse-Davies J, et al. Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605. 2. Paterson MEL, Wade-Evans T, Sturdee DW, et al. Endometrial disease after treatment with estrogens and progestogens in the climacteric. *Br Med J* 1980;280:B22-B24. 3. Magos AL, Brinart M, Studd JWW, et al. Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985;67:496-499. 4. Whitehead MI, Lane G, Siddell N, et al. Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:41-52. 5. Barnes RB, Roy S, Lobo RA. Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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## Actions of the KMA Judicial Council

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*The following is a summary of actions taken by the Judicial Council of the Kentucky Medical Association since the 1986 KMA Annual Meeting. This summary is provided in response to Resolution T, adopted by the 1986 House of Delegates, which called for the Council to work with the Board of Medical Licensure in promoting quality medical care and informing the membership of these efforts on a periodic basis.*

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The Council has always worked in concert with the Board of Medical Licensure to ensure high standards for the profession, but recognized the need to publicize these efforts to the membership. It was therefore agreed that final actions of the Council and specific items considered by the Council which may be of interest to the general membership should be published in the KMA Journal on a quarterly basis, or as needed.

The Council has considered several complaints since the Annual Meeting. In one instance, it was determined that insufficient grounds existed for the complaint, and the case was dismissed. It should be noted that the Judicial Council does not have subpoena powers, and must rely on the parties involved to provide adequate information for a full consideration of an issue.

In response to a complaint involving possible patient solicitation, it was the

opinion of the Council that it is not unethical for a doctor to announce the opening of a new office practice or to inform former patients of a change in office location.

The Council also considered a complaint that a physician had refused to provide an itemized statement or file insurance claims. After further evaluation it was determined that the physician had complied with both of these requests, and the case was dismissed.

A complaint was reviewed regarding a fee received for services rendered by a nurse anesthetist employed through a physician's office. The Council determined that it was not unethical for a nurse anesthetist to administer anesthesia under the supervision of an anesthesiologist. It was also noted that the physician had acknowledged an error in computing the fee for this service and it was subsequently reduced.

In reviewing a complaint regarding a surgical procedure, it was determined that appropriate care had been rendered.

The Council reviewed a complaint that a nursing home patient was not receiving adequate attention from her physi-

cian. An investigation revealed that the physician had been visiting the patient and appropriate care had been rendered.

In response to a request for an opinion regarding the transfer of patient records from one physician to another, the Council affirmed Section 7.01 of the *Opinions of the Council on Ethical and Judicial Affairs of the American Medical Association* which states that records should be transferred in a timely manner with appropriate authorization from the patient. It was also the opinion of the Council that a reasonable fee could be charged on a nondiscriminatory basis for copying extensive records.

The Council now has under study the issue of "management contracts" or situations in which a physician enters into an agreement whereby the hospital assumes most of the administrative costs of the physician's practice with the anticipation that patients will be referred to that hospital by the physician.

The Council accepted for information Resolution L, adopted by the 1986 KMA House of Delegates, calling for the provision of second opinion reports to the initial physician on a timely basis.



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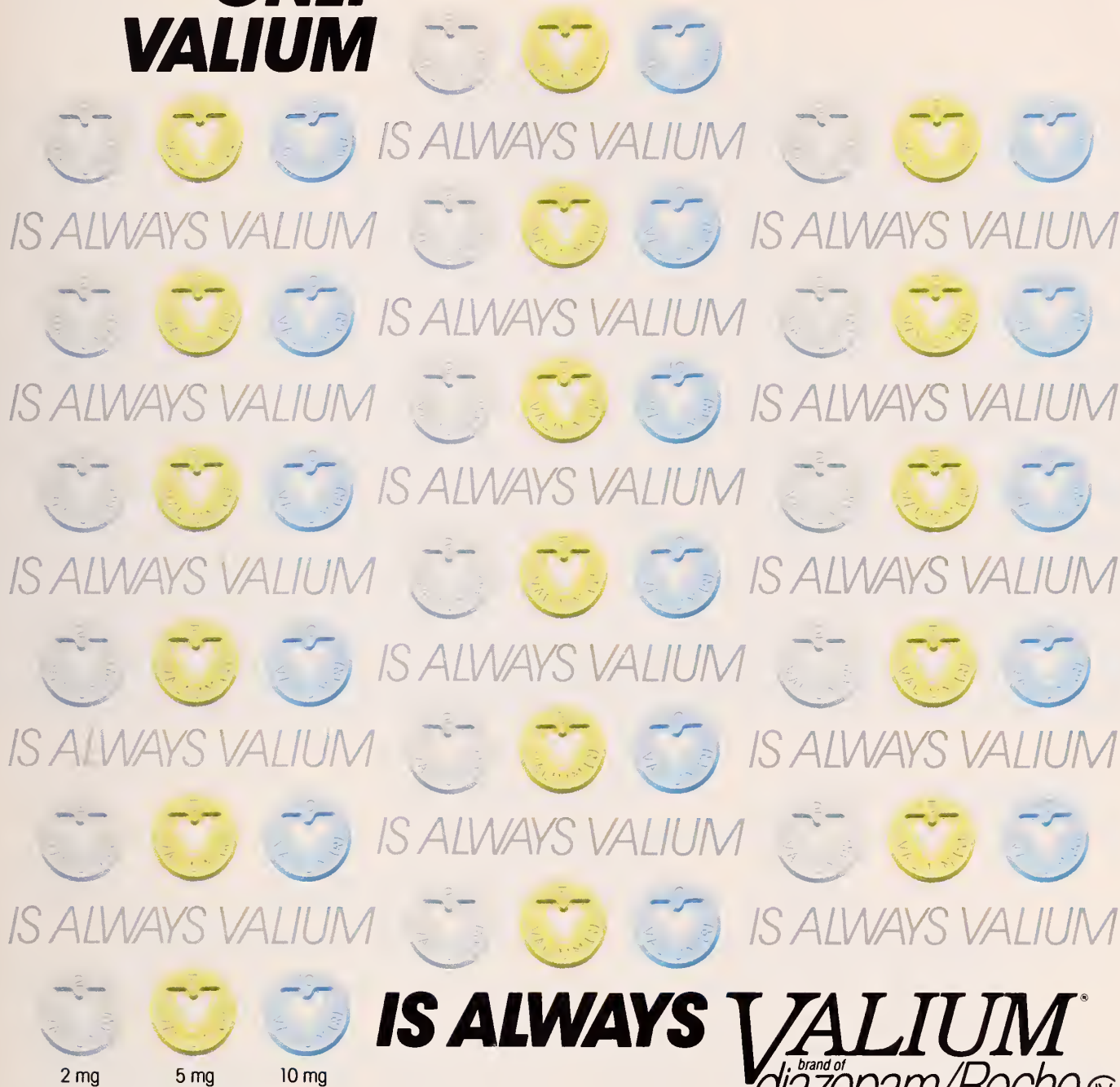
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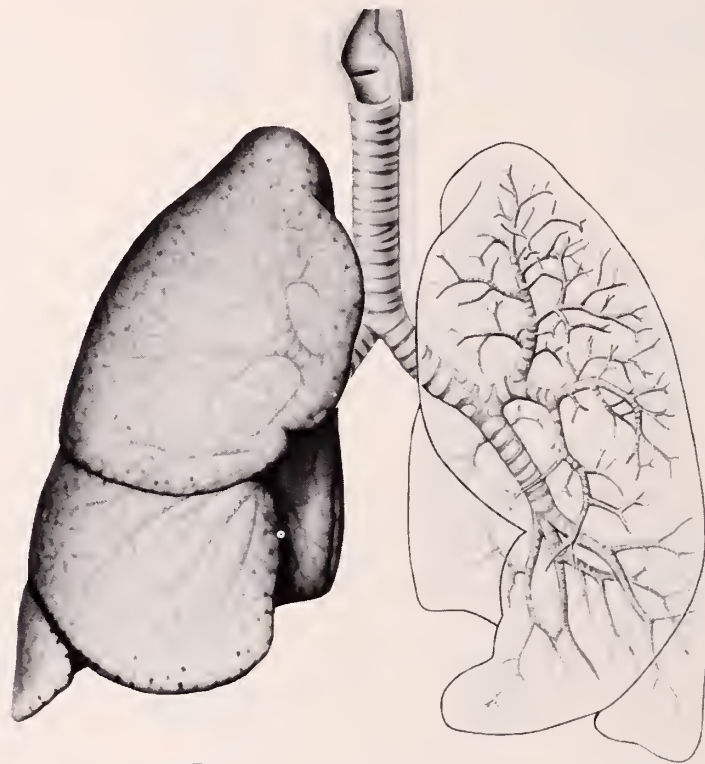


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#### Brief Summary Consult the package literature for prescribing information

**Indications and Usage.** Cecilor® (cefactor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

**Lower respiratory infections** including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Cecilor.

**Contraindication.** Cecilor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

**Warnings.** IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS. AMID THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS TO BOTH DRUG CLASSES.

Antibiotics, including Cecilor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics including macrolides, semisynthetic penicillins, and cephalosporins; therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, manage-

ment should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

**Precautions.** **General Precautions.** — If an allergic reaction to Cecilor® (cefactor, Lilly) occurs, the drug should be discontinued and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids. Prolonged use of Cecilor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures, when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Cecilor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made. Because safe dosage may be lower than that usually recommended. As a result of administration of Cecilor, a false positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistix® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

**Usage in Pregnancy — Pregnancy Category B.** — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in fetuses given three times the maximum

human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Cecilor® (cefactor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers.** — Small amounts of Cecilor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Cecilor is administered to a nursing woman.

**Usage in Children.** — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

**Adverse Reactions.** Adverse effects considered related to therapy with Cecilor are uncommon and are listed below.

**Gastrointestinal symptoms** occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

**Hypersensitivity reactions** have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100), pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Cecilor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have

occurred in patients with a history of penicillin allergy. Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

**Causal Relationship Uncertain.** — Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

**Hepatic.** — Slight elevations in SGPT, SGPT or alkaline phosphatase values (1 in 40).

**Hematopoietic.** — Transient fluctuations in leukocyte count predominantly lymphocytosis occurring in infants and young children (1 in 40).

**Renal.** — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

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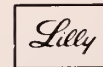
**Note.** Cecilor® (cefactor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

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# MEDICAL EXCELLENCE '87

**September 15-17**

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## **Scientific Sessions**

The Ramada Inn East/Bluegrass Convention Center will host the 1987 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the morning of September 15, 16 and 17. The program scheduled for Wednesday will feature J. Kelley Avery, M.D., Director of CME at St. Thomas Hospital in Nashville. His presentation "Dealing with a Bad Result," will focus on risk management and will be followed with a roundtable discussion conducted by physicians from seven specialty groups who will discuss the impact of risk management on each specialty. A question and answer session will follow.

## **Specialty Group**

Programs for 22 specialty groups will be held during the afternoons of September 15, 16 and 17. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Ramada Inn East and Convention Center. Physicians attending general sessions and specialty group meetings will qualify for Category I Credit.

## **KMA House of Delegates**

The opening meeting of the House of Delegates will be held Monday, Sept. 14, at 9 a.m. in the Julia Belle Room of the Convention Center. Reference Committee meetings will begin at 2 p.m. on Monday and the final meeting of the House will begin at 6 p.m. Wednesday, Sept. 16. Officers for the

1987-88 Associational year will be elected during the final House meeting.

## **Other Activities**

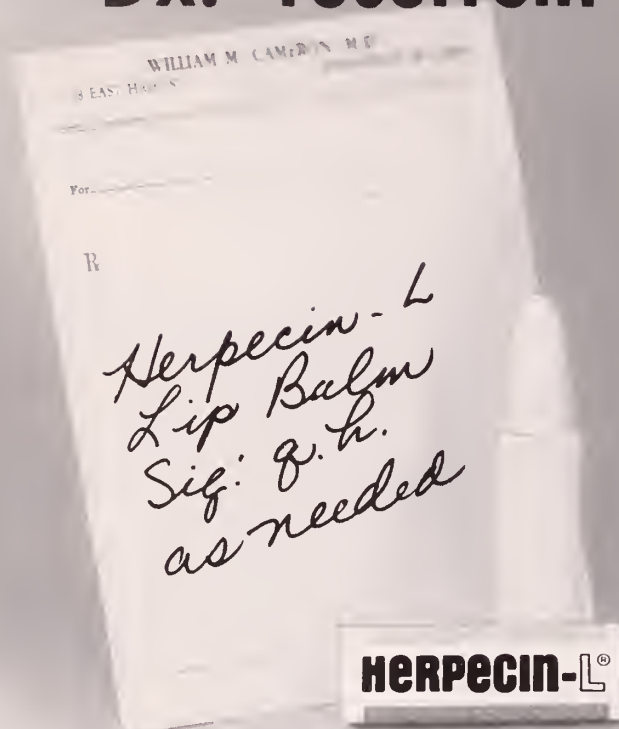
The Annual KEMPAC Seminar will be held Monday, Sept. 14, at the Bluegrass Convention Center. A reception begins at 6 p.m. with dinner at 7 p.m. Kentucky Gubernatorial candidates are scheduled as guest speakers.

The President's Luncheon will be held Sept. 16, with presentations of KMA awards and the installation of the 1987-88 KMA President Donald C. Barton, M.D.

Scientific and Technical Exhibits will be on display featuring new medical products, services and techniques. Members and guests have an opportunity to visit this area during the 30-minute intermissions scheduled throughout the general sessions and specialty group meetings.



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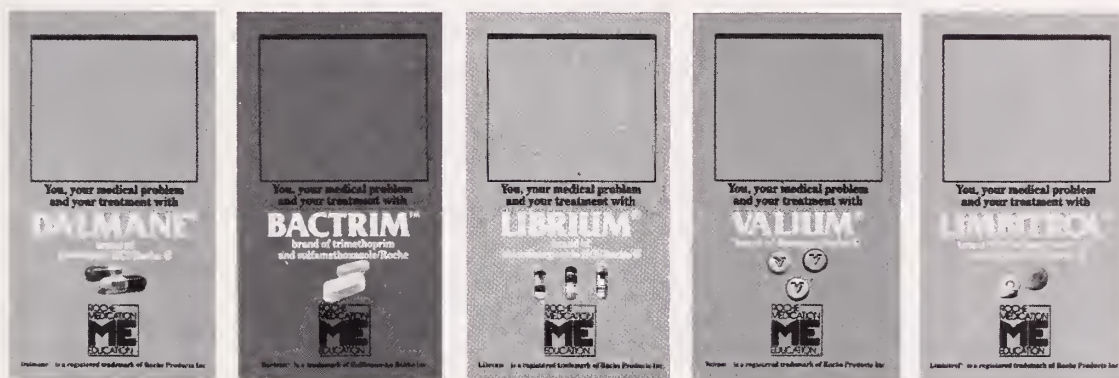


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# Where's The Beef?

Several years ago, a U.S. Presidential primary campaign was greatly affected by the question — "Where's the beef?" The question was designed to bring out the shallowness and lack of commitment of one of the candidates.

At this stage of our efforts toward relief of the liability dilemma, it is appropriate that we ask the same question. On paper, we have a very logical and well-designed agenda which outlines an effective way to build momentum toward the 1988 Legislature. Our strategy entails governmental, KMA membership, private sector/coalition, and public education activities.

So — Where's the beef? Today, the grim answer to that rhetorical question appears to be that there is little in our campaign. The beef in our crusade is the commitment, participation, enthusiasm, and knowledge of each of the 4,000 doctors who belong to the Kentucky Medical Association. Without that we have no chance for success.

Thus far, the number of Kentucky physicians that have taken the time to

study and understand the liability puzzle as it has developed here and in other states is discouragingly low. The degree of ignorance of the basics of the problem is demonstrated in discussions in doctors' lounges and hospital halls.

The KMA AdHoc Committee on Professional Liability met early this year — out of 38 members only 16 showed up, and the representatives of three specialties with the highest rates and the most severe problems did not attend.

In March, KMA sponsored an excellent seminar on medical liability and, in spite of the first-rate program with national authorities, the attendance was disappointing.

It is not only what doctors do not know that is unnerving, but even worse is what they know that is not so.

Time is running short. Very soon we will be into the 1988 Legislative session and we cannot afford procrastination. The following suggestions would take little time and could have very positive effects on our campaign.

1. Read your KMA mail — we try to keep this concise and informative. Any action called for is usually obvious.
2. Find out who your State Representative and Senator is and talk to them about what the liability crisis is doing to medical costs and the availability of care.
3. Scan the weekly AMA News for what is going on in other states and what has resulted from their efforts.
4. Speak to your non-medical friends, clubs, social groups, and, as appropriate, your patients, about the liability mess.
5. Attend at least one good seminar on Professional Liability to get a feel for the complexity and multiple possible options.

Acceptable solutions will not magically appear. Only with a unified effort and **lots** of beef can we have any hope of succeeding.

**Richard F. Hench**  
KMA President



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# Pleural Effusion

## An Unusual Feature of Histoplasmosis

THOMAS M. ROY, M.D. AND P.K. SHAH, M.D.

Physicians in Kentucky and the Ohio Valley are familiar with the clinical presentations of disease caused by the dimorphic fungus, *Histoplasma capsulatum*. Practicing medicine in an area endemic for this soil saprophyte allows us a unique opportunity to observe and document some of the uncommon presentations of this ever present pathogen. Pleural effusion is an extremely rare feature of histoplasmosis. We were fortunate to care for a patient with a newly diagnosed case of histoplasmosis who presented with a pleural effusion that was culture positive for *H. capsulatum*. This patient's presentation reminded us that there are still unanswered questions regarding this disease that holds a prominent place in our differential diagnoses.

The rarity of pleural fluid accumulation in the clinical expression of histoplasmosis is accentuated by the frequency with which humans in endemic areas are infected. It has been estimated that about 500,000 individuals are infected annually in the United States,<sup>1</sup> and Sutliff and Bennett quote an overall estimate of 40 million infected persons in the country.<sup>2</sup>

Fortunately, fewer than 0.5% of infected individuals present with clinical disease,<sup>3</sup> and the majority of these present with a self-limited illness with influenza-like symptoms. During the acute phase of clinical illness in the normal host with heavy exposure, the chest radiograph may show patchy areas of pneumonitis, usually predominant in the lower lobes, and often accompanied by lymphadenopathy in the hilar and peritracheal areas. In spite of the fact that pleuritic chest discomfort is a common symptom of primary pulmonary histoplasmosis, radiographic evidence of pleural effusion is rare.

Connel and Muhm report only one pleural effusion in a series of 249 radiographs of histoplasmosis patients,<sup>4</sup> and an earlier study of 9,073 histoplasmin - positive school children yielded none with pleural effusion.<sup>5</sup>

*H. capsulatum* causes more significant disease in the compromised host, presenting as a chronic cavitary process and as a disseminated disease with wide-spread extra-pulmonary foci of infection. Interestingly, even in these settings, pleural involvement is infrequently reported.<sup>3,6</sup>

When strict criteria are applied for the diagnosis of histoplasmosis, fewer than 20 cases with pleural effusion had been reported by 1983.<sup>7</sup> If serologic data are accepted as sufficient for a positive diagnosis, this number doubles but remains small in comparison to the incidence of the disease (see Table 1). Of this total number of cases that we were able to find in an extensive literature review, only our case and four others actually grew the pathogen from the pleural fluid. The remaining pleural effusions that are reported as secondary to histoplasmosis have been attributed to infection with this fungus on the basis of their occurrence in the proper clinical setting with demonstration of *H. capsulatum* in the sputum or other tissue obtained surgically, and/or serologic evidence of recent infection with the organism.<sup>7</sup>

Review of the reported cases suggest three possible explanations for the occurrence of pleural effusion in histoplasmosis.

First, pleural involvement may be a reflection of hematogenous dissemination or continuous spread of *H. capsulatum*. This would seem to be a reasonable explanation for those cases that have yielded stain positive or culture positive material from the pleura or the lung parenchyma. As indicated earlier, this is an extremely rare occurrence. Closed pleural biopsies have not been helpful in isolating the organism. We could find no report that documented growth of *H. capsulatum* from this type of biopsy specimen. The histology of the

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Department of Respiratory and Environmental Disease  
University of Louisville

---



TABLE 1  
REPORTED PLEURAL EFFUSIONS ASSOCIATED WITH  
HISTOPLASMOSIS

Number of Patients	Diagnostic Modality
4	Organism cultured from pleural fluid
16	Stain/culture of tissue from thoracotomy or decortication
24	Organism not recovered; presumptive diagnosis based on clinical picture and positive serology
10	Organism not recovered; associated with pericarditis secondary to <i>H. capsulatum</i>

pleura obtained in this fashion has been normal or has shown only evidence of non-specific inflammation.

A second explanation for the pleural fluid accumulation may be a pleuritis resulting from a hypersensitivity reaction to histoplasmin. Pleural fluid accumulation due to hypersensitivity reaction is reported in other diseases such as primary pulmonary tuberculosis. Also, hypersensitivity is the present hypothesis explaining the pathophysiology of fibrosing mediastinitis and pericarditis caused by this same fungus. While the strongest evidence for the diagnosis of histoplasmosis remains the recovery of the organism, some investigators argue for inclusion of patients with clinical disease and only serologic evidence of active or recent infection. They correctly point out that in most large outbreaks of primary pulmonary infection, all cultures are repeatedly negative in greater than 40% of clinically affected patients.<sup>8</sup> The limitations inherent in the microbiologic recovery of the organism may be one factor limiting the reported incidence of pleural effusion in histoplasmosis, but it also raises the question whether recovery of the organism from the pleural fluid should even be expected in all instances. Could there be a subset of pleural effusion without viable organisms that are due only to hypersensitivity reaction to histoplasmin?

The third clinical situation in which pleural effusion occurs is with active pericarditis due to histoplasmosis. Here there appears to be a combination of a mechanical factor and the hypersensitivity response of the pericardium. Picardi et al reported 16 patients with pericarditis attributed to histoplasmosis and found seven of these to have pleural effusion.<sup>9</sup> Wheat et al report 24 patients with pericarditis and three of these had pleural effusions.<sup>10</sup> All the pleural fluid from these cases failed

to grow *H. capsulatum*, yet all patients met the serologic criteria for recent or active infection.

When pleural effusion has occurred in association with primary pulmonary histoplasmosis, it has usually been accompanied by a patchy infiltrate or sometimes a subpleural nodule. The effusions have been small to moderate in amount and generally occur unilaterally on the same side as the observed parenchymal disease. There is not enough clinical information on pleural effusion occurring with cavitory or disseminated histoplasmosis to allow definite comment on its expected location. The analyses of the pleural fluids have been consistent with an inflammatory process, showing exudative characteristics with elevated protein levels. The cellular content has been predominantly lymphocytic, with increased numbers of eosinophils and mesothelial cells also described. The majority of reports also document a serosanguinous to bloody appearance of the fluid.<sup>11</sup>

Fungal stain of the pleural fluid for *H. capsulatum* has not been helpful, and culture of the fluid has grown the organism in our case and only four other reported instances. Closed pleural biopsy, as mentioned earlier, has not been helpful.

Based on the limited number of cases in the literature, it appears that the presence of a pleural effusion in a patient with clinical evidence of histoplasmosis does not influence the patient's eventual prognosis. Treatment with specific therapy should be dictated by the underlying condition of the host rather than by the presence of pleural effusion. In a normal host, spontaneous resolution of the pleural fluid can be expected over a two to four week interval.<sup>12</sup> Chest tubes or repeated thoracentesis do not appear to be warranted. Some pleural thickening may occur and one case of fibrosing pleuritis that required eventual decortication has been described by Schub,<sup>13</sup> but this degree of pleural reaction is unusual.

In circumstances involving an immunocompromised host or one manifesting the chronic pulmonary form of histoplasmosis, specific therapy is appropriate. Again, no particular interventions directed toward the pleural space are indicated, since consistent clinical response appears to occur with administration of antifungal medication.

In summary, a review of the available medical literature confirms that the presence of pleural effusion in histoplasmosis is distinctly unusual. We have described the clinical settings in which pleural fluid has been reported and have suggested three possible mech-

## PLEURAL EFFUSION—Roy and Shah

anisms for the fluid accumulation, one of which may be an expression of an individual's hypersensitivity to the histoplasmin antigen during infection. We found no evidence that the presence of a pleural effusion in histoplasmosis influences the patient's prognosis or by its presence necessitates specific therapy.

**References** 1. Hammerman KH, Powell KE, Tose PD: The incidence of hospitalized cases of systemic mycotic infections. *Sa-bouraudia* 12:33-45. 2. Sutliff WD, Bennett JE: *Histoplasma capsulatum*. IN: Mandell G (ed): *Principles and Practice of Infectious Disease*. New York, John Wiley & Son 2034-2047, 1979. 3. Wheat LJ, Slama TG, Eitzen HE, et al: A large outbreak of histoplasmosis: Clinical features. *Ann Int Med*, 94:331-337. 4. Connell JV, Jr., Muhm JR: Radiographic manifestations of pulmonary histoplasmosis: A 10-year review. *Radiology* 121:281-285, 1976. 5. Whitehouse WM, Davey WN, Engelke OK, et al: Roentgen findings in

histoplasmin-positive school children. *Mich Med* 58:1266, 1959. 6. Goodwin RA, Jr., Des Prez RM: Histoplasmosis: State of the Art. *Am Rev Respir Dis* 117:929, 1978. 7. Light RW: Pleural effusion secondary to fungi, Actinomycosis, and Nocardiosis. IN: *Pleural Diseases*. Philadelphia, Lea and Febiger, 127-132, 1983. 8. Wheat LJ, French ML: The diagnostic approach in histoplasmosis. *Immuno Aller Pract* 5(9):265-274, 1983. 9. Picardi JL, Kauffman CA, Schwarz J, et al: Pericarditis caused by *Histoplasma capsulatum*. *Am J Card* 37:83-88, 1976. 10. Wheat LJ, Woss J, Norton J, et al: Cavitory histoplasmosis occurring during 2 large urban outbreaks: Analysis of clinical, epidemiologic, roentgenographic, and laboratory features. *Medicine* 63:201-209, 1984. 11. Wheat LJ, French M, Kohler RB, et al: The diagnostic laboratory tests for histoplasmosis: Analysis of experience in large urban outbreak. *Ann Int Med* 97:680-685, 1982. 12. George RB, Penn RL, Kinasewitz GT: Mycobacterial, fungal, Actinomycotic and Nocardial infections in the pleura. *Clin Chest Med* 6:67-76, 1985. 13. Schub HM, Spivey CG, Jr., Baird GD: Pleural involvement in histoplasmosis. *Am Rev Respir Dis* 94:225-232, 1966.

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# Deafness and Cochlear Implants

## Results of Clinical Trials

IAN M. WINDMILL, PH.D., SERGE A. MARTINEZ, M.D.  
BARBARA A. EISENMENGER, M.S. AND MICHAEL B. NOLPH, M.D.

---

*Until recently, few medical or surgical options were available to improve the hearing capabilities of the profoundly deaf. The development of the cochlear implant offers a surgical alternative for those who are unable to benefit from the hearing aid. The University of Louisville has been in the unique position of participating in the clinical trials of two second-generation cochlear implants. The results of our investigations reveal a wide range of potential benefits which are decided more by inherent patient characteristics than by specific surgical or rehabilitative procedures. Given the alternative of complete hearing loss, however, even those patients with minimal restoration of auditory skills express satisfaction with the implant device.*

---

Few medical or surgical options are available that produce even slight improvement in auditory reception capabilities in patients that have severe to profound sensorineural hearing losses. The usual treatment for this population has been an appropriate, powerful hearing aid system. However, even with the significant advances in hearing aid technology and fitting procedures, there is a small percentage of patients who cannot benefit from this strategy. For these individuals the cochlear implant system was developed.

The cochlear implant bypasses the damaged inner ear sensory system and directly stimulates the VIII cranial nerve with electrical current, thereby "restoring"

---

*From the Division of Communicative Disorders and the Division of Otolaryngology, Department of Surgery, University of Louisville School of Medicine, Louisville, Kentucky*

---

some auditory perception. All cochlear implant systems have three integral parts:

1. A surgically implanted electrode array through which the auditory nerve is stimulated [Fig. 1]. The primary electrode bundle consists of a series of from one to 22 electrodes that are inserted through the round window to varying depths in the scala tympani which is close to the auditory nerve. When secondary ground electrodes are also present, they are placed on the promontory or embedded within the muscle tissue of the middle ear.
2. A sound processor, worn externally, is responsible for analyzing the incoming acoustic signal and distributing the frequency information to the appropriate electrodes [Fig. 2]. The analysis may be a simple band pass filter network or a complex frequency extraction system.
3. An interface between the external and internal devices may be a subcutaneous passive electrical receiver or a percutaneous pedestal with direct external communication. While a direct electrical connection is made between the signal processor and electrode array via the percutaneous pedestal, the subcutaneous receiver receives both power and stimulation information via radio frequency waves or electromagnetic induction.

Approximately 18 different implant systems are under investigation and are subject to strict scrutiny by the Food and Drug Administration (FDA). Although several systems have been approved, these are restricted to specific populations. While the sophistication level among these devices varies substantially, two general forms can be delineated. The single channel implant, usually used in conjunction with a single electrode, acts as a simple acoustic to electric converter



**Fig. 1:** The surgically implanted electrode arrays. On the left is the array manufactured by Symbion, Inc. and on the right is the implant manufactured by Nucleus Corporation.

and delivers the representative electrical signal in toto to the single electrode. Multi-channel implants, usually with multiple electrode arrays, use the aforementioned signal analysis and send varying frequency signals to predefined corresponding electrodes.

Current data<sup>1,2</sup> suggest that multi-channel implant systems provide a greater range of psychoacoustic and speech perceptual information than their single channel counterparts. The primary reason for this advantage lies in the ability of multi-channel multi-electrode arrays to take advantage of the tonotopic organization of the auditory system. By distributing the frequency information in a way similar to the manner in which acoustic frequency information is distributed within the cochlea, utilization of intact perceptual abilities can be realized. Unfortunately, acoustic information in a normal cochlea is distributed over its entire length of 2½ turns, while the electrode arrays of cochlear implant systems reach a maximum depth of approximately one turn (25 mm). Single channel systems, by virtue of a single electrode, consistently stimulate a given set of auditory nerve fibers, regardless of the frequency of the incoming acoustic signal. As the resolution capability of auditory neurons lies below 500 Hz, all sounds of greater frequency elicit identical precepts. Hence a monotonic signal is the normal perception associated with single channel implant use.

### Methods

Our divisions, in conjunction with Humana Hospital-University, have been conducting clinical trials with two multi-channel implant systems. These trials, which are being held simultaneously with other centers in the



**Fig. 2:** The externally worn speech processing unit and head-band interface for the Nucleus implant.

United States, are aimed at establishing the safety and efficacy of the implant systems. Our initial trials were conducted with a 4-channel implant using a percutaneous pedestal (Symbion Inc, Salt Lake City). We subsequently used a 22-channel transcutaneous system (developed by Nucleus Limited, Melbourne, Australia, and distributed by Cochlear Corporation, Englewood, Colorado). Both devices are currently available at this center.

When clinical trials were begun, patients were chosen for implantation based on strict criteria regarding overall auditory skills, general physical condition, psychological profile and potential benefit from an implant. The most significant criterion was that the patient had not benefited from traditional amplification systems, *ie*, no degree of communicative competence, however slight, could be realized using the optimal hearing aid for that individual.

Other criteria included:

1. had to be 18-year-old or older
2. post linguallly deaf
3. psychologically stable
4. good general health
5. an electrically stimulable auditory nerve present

Special tests and/or procedures were developed to measure each parameter.

Eight people met the criteria and had the implantations. Seven received the Symbion 4-channel device; and one received the Nucleus 22-channel. The number disparity between the devices is primarily due to the difference in start-up dates with each device. One patient, who received a 4-channel device and was implanted at the request of physicians at Emory University, Atlanta, is being followed by them and is not counted



TABLE 1				
CHARACTERISTICS* OF SUBJECTS				
Age	No. years deaf	Etiology of deafness	Implant	Processor fitting date <sup>+</sup>
26	10	meningitis	sympion	January
75	12	ototoxicity	sympion	April
61	54	unknown	sympion	March
45	12	unknown	nucleus	April
39	1	ototoxicity	sympion	May
30	25	rubella	sympion	August
63	25	unknown	sympion	October

\* = all subjects were male

<sup>+</sup> = all occurred in 1985

as part of the University of Louisville implant population.

Pertinent characteristics of this group, shown in Table 1, demonstrate a wide range. Hence, a homogeneous group cannot be defined.

All implant patients followed a relatively similar post surgical routine with follow-up and management. Depending on the device implanted and the noted progress, each patient was required to return at periodic intervals for adjustment of the external processor unit and evaluation of auditory skills. The processor adjustment consisted of "fine tuning" each channel and/or electrode to provide optimal benefit. The auditory skills of each person were evaluated in several manners, again depending on the progress noted. Subtests of the Minimal Auditory Capabilities<sup>3</sup> (MAC) battery were administered to assess the redeveloping auditory perceptions of the patients. This test battery has become a widely accepted evaluation protocol to assess a complete range of auditory skills, from presence versus absence of sound to ability to understand speech, for implant patients. In addition to the MAC battery, pure tone audiograms and measures of speech reception skills were obtained.

### Results

Our patients have achieved the same degree of success as has been noted at other research centers with similar-sized groups. A wide range of surgical phenomena, auditory skills and patient satisfaction occurred among the groups. The results varied so much that standard statistical descriptions are avoided. General descriptions have been used instead.

One of the critical surgical components was the insertion of the maximum number of electrodes into the cochlea. As the neural population in each patient could vary, assurance that a significant number of the elec-

trodes were in close proximity to residual neural tissue was critical. Proper and maximal insertion was obtained in four patients. This insertion unfortunately was complicated by several factors in the other three patients. One patient was utilizing a single channel implant at the time of surgery; and the intra-cochlear electrode was adherent to a focus of ossification of the cochlear labyrinth. This necessitated widening the cochlear duct which may have adversely affected the auditory neural tissue. A second patient had what appeared to be a slight fracture of the cochlea which prevented insertion of the electrode array. The decision was made to close the area and attempt to implant the opposite ear at a later date. This was successfully accomplished approximately six weeks later. The third patient was determined to be at risk for general anesthesia and therefore

TABLE II				
RESULTS FOR TWO PATIENTS ON SELECTED MAC BATTERY SUBTESTS				
Subtest	Patient A		Patient B	
	pre-implant* (%)	post-implant <sup>+</sup> (%)	pre-implant* (%)	post-implant <sup>+</sup> (%)
Spondee words <sup>‡</sup>				
same-different	60	70	55	90
four choice	10	45	25	90
(closed set)				
recognition	0	0	0	12
(open set)				
Lipreading				
without auditory clues	34	31	11	17
with auditory clues	45	34	18	94

\* = hearing aid

<sup>+</sup> = cochlear implant

<sup>‡</sup> = two syllable words with equal stress per syllable, e.g., baseball, cowboy, ice cream.

implantation was attempted using a local anesthesia. Movement by the patient during the procedure was a detriment to the surgical objective and extended the operating room time beyond the normal three-hour standard. Implantation was achieved, however, after an extended period.

Auditory skills ranged dramatically for these patients. At the low end of the perceptual range was one patient whose auditory performance with the implant was essentially the same as with a hearing aid. We have only been able to document minimal change in his auditory skills from the pre- to post-implant condition [Table II]. He does appear, however, to experience greater communicative efficiency with family members.

At the other extreme are two patients, each with a different type of device, who have benefited to such an extent that visual, written or tactile communication is unnecessary. As an example of the degree of improvement offered by the implant, one patient's score on the lipreading subtest of the MAC battery jumped from 17% using vision alone to 94% using vision plus the implant [Table II]. Furthermore, this patient is now able to use the telephone to the extent that near normal conversations with strangers can take place.

The remaining patients fall between these two extremes and are probably more representative of the level of success achieved with cochlear implant systems. They have some degree of pitch and loudness perception and are able to make gross differentiations among sounds. Their ability to understand speech is limited; however, improvement in communication is noted when these patients use the device plus lipreading.

### Discussion

The reason for the wide range of auditory skills is due to a complicated and multi-faceted interaction of a variety of factors. These include:

1. length of deafness
2. etiology of deafness
3. age of the patient
4. number of usable electrodes
5. psychoacoustic parameters associated with each electrode, *ie*, electrical threshold, maximum tolerable levels, pitch perception, *etc*.
6. type and amount of intervention and rehabilitation
7. residual neural population

Neural population is perhaps the most critical but least controllable with regard to success. Unfortunately, present procedures and protocols make predetermina-

tion of the neural population impossible. Even after implantation, estimates of the place and extent of remaining nerve fibers are tenuous. The degree of success, therefore, is probably related to characteristics inherent in the patient which cannot be controlled by the implant team. It is likely that until these characteristics are further delineated and are capable of being measured, the same range of results will be observed.

Of particular significance is the degree of satisfaction expressed by each patient. Even given the range of measurable results, all patients have expressed personal satisfaction with the extent of communicative improvement the device offers. All expect to improve over time and continue to utilize the device on a regular basis.

Ethical concerns have been voiced over the risk of operation *vs* the benefit derived from an investigational device that is not as sophisticated or efficacious as what is predicted to be available in the future. The length of the operation, the risk to the facial nerve, potential intracranial complications and further cochlea damage have been proposed as reasons to avoid implantation until further animal research has been performed. This has been of special concern as requests are made to the FDA for approval to insert multi-channel devices into children.

Surgical risks are well-known and apply to the adult and child. The approach used is utilized by all ear surgeons in cleaning or exploring the mastoid cavity, as in a mastoidectomy. The anesthetic risk is consequently no greater than in a standard mastoidectomy. The operative time is very close to that required for routine mastoid surgery. In approaching the round window from the mastoid cavity, it is necessary to open into the middle ear space posteriorly. This is done by creating a small opening through the posterior wall of the external auditory canal and necessarily drilling close to the facial nerve. This is not a unique approach to the operation, however, as it is one that has been mastered by most trained otolaryngologists who perform ear surgery.

An electrode, placed from the mastoid cavity through the round window, is threaded into the turns of the cochlea approximately 25mm. In all but one of the devices, the pedestal of the implant and the electrode are implanted internally. Only the 4-channel Symbion device has a pedestal that extends through the skin for electrical connection. Approximately 55 of the percutaneous devices and over 700 of the other designs have been implanted worldwide. There have been no re-



ported cases of significant otologic complications or intracranial infections involving any of the devices used.

The concern over further cochlear damage is more a question mark in children because a considerable amount of data has already been obtained on adults and relatively little on children, especially for multi-channel implants. No significant ossification of the cochlea has been directly attributed to implant of either the single channel (6mm) or multi-channel (25mm) design. Over 200 6mm, or short electrodes, have been implanted in children. No pathologic reactions have been reported.

The fear that electrodes will not be replaceable once inserted has not been verified or disproved. We have replaced single channel (6mm electrodes) with the longer multi-channel electrodes in two patients and believe this can be done without difficulty. Another investigator has replaced at least one multi-channel device with another multi-channel electrode in an adult. In that case, there was no difficulty in removing the original electrode from the cochlea. That most electrodes can be replaced with other electrodes of any length without difficulty has not been proven, but is probable.

### Summary

Our cochlear implant program results are consistent with the results seen at other research centers. The results appear to be more a factor of inherent patient characteristics than specific surgical or rehabilitative management procedures. Given the alternative of complete hearing loss, however, even those patients with minimal auditory skills express satisfaction with the implant device. As continued research identifies the factors affecting success, the efficacy of this device in improving the communicative skills of the profoundly deaf individual will also be realized.

**References** 1. Gantz B, McCabe B, Tyler R, Preece J: Evaluation of four cochlear implant designs. Presented at the International Cochlear Implant Symposium and Workshop, Melbourne, Australia, August, 1985. 2. McCabe B. Cochlear implants: comparison of three systems. *New Horizons In Otolaryngology — Head and Neck Surgery* 5:1-4, 1986. 3. Owens E, Kessler D, Telleen C, Schubert E: The minimal auditory capabilities (MAC) battery. *Hear Aid J* 34:9-34, 1981.

# Role of the Consultation-Liaison Psychiatrist in the Treatment of Aids Patients

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*Two cases of Acquired Immune Deficiency Syndrome (AIDS) referred to the psychiatric consultation-liaison service are reviewed. In both cases considerable overlap was observed with regard to the reason for the consultation request, the reaction of the medical staff to the patient, and the reaction of the patient to the illness and to the staff. The role of the psychiatric consultant in minimizing patient-staff conflict in AIDS cases is examined.*

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Acquired immune deficiency syndrome (AIDS) is a relatively new disease entity presenting substantial public health problems.<sup>1,2</sup> AIDS causes a marked suppression of cell-mediated immunity which places affected individuals at high risk for contracting opportunistic infections.<sup>1</sup> This illness is seen primarily in homosexuals. Approximately 70% of AIDS patients have been homosexual or bisexual.<sup>1,2</sup> Other groups at high risk for the disease include IV drug abusers (17%) and hemophiliacs.<sup>1</sup>

The cause of AIDS is now known to be a viral agent, spread by both sexual contact and by blood borne transmission. There is no evidence that the disease is spread by casual, non-sexual, non-blood borne routes.<sup>1</sup> Clinical manifestations of AIDS include fever, lymphadenopathy, severe opportunistic infections, unusual neoplasms (eg Kaposi's sarcoma) and hematologic abnormalities. The mortality rate ranges from 70-100%, with no effective treatment available to date.<sup>1,2</sup>

There have also been case reports of organic mental syndromes in AIDS patients.<sup>3</sup> These include progres-

sive dementia and transient encephalopathy secondary to opportunistic infections. The CNS complications produced by AIDS may present initially as psychiatric symptoms including delusional organic affective disorders, anxiety, depression and decreased libido.<sup>3,4</sup>

AIDS patients also experience adjustment and psychosocial problems in association with the illness. Techniques used in dealing with severely ill or terminal patients may be helpful, but AIDS patients still present unique problems.<sup>5</sup> AIDS patients often must cope with a collapse of their social support systems. Some patients are ostracized within the hospital because of unrealistic fears about the illness or disapproval of their lifestyle. At times medical personnel have refused to have contact with patients suspected of having AIDS. At other times the medical staff perceives the disease as "hopeless" implying a "giving up" attitude.<sup>6</sup> Patients experience a variety of reactions ranging from shock, guilt and denial to fear, anger and sadness. While these reactions parallel the stages of death and dying outlined by Kubler-Ross, they may often be more labile and intense in AIDS patients.<sup>5</sup> The intensity of the reactions of both the patient and the staff may impair or distort communication, leading to patient-staff conflict.

Because of the complicated issues involved in treating AIDS patients, psychiatry can offer a great deal of assistance. Psychiatrists, for example, can address the fears of both patients and staff, as well as the exaggerated reactions and disapproval of hospital workers toward these patients.<sup>5</sup> This is essential for effective treatment. Two cases are now presented of AIDS patients referred to the psychiatric consultation-liaison service. Patient-staff reactions and conflicts are examined, and the role of the psychiatric consultant is discussed.

**Case 1** was a 37-year-old black homosexual male, who recently moved cross country to be closer to his

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family. During the past year the patient had a series of brief hospitalizations for recurrent upper respiratory infections. The diagnosis of *Pneumocystis carinii* pneumonia was made during the current admission and a work-up for AIDS was initiated. The patient denied history of past medical illnesses and denied contact with other AIDS victims. After an extensive work-up involving several medical services the diagnosis of AIDS was made.

The request for psychiatric consultation was made six weeks after admission and was initiated by the patient. The consult request simply read "anxiety." On examination it was found that the patient had a long history of anxiety dating back to adolescence. He previously had one period of psychotherapy which lasted six months, and was reported as a positive experience. He had felt increasingly anxious since moving, in part because he was unable to find a job. The anxiety was complicated by a feeling of social isolation and increased concern about his illness. He reported that his family had always disapproved of his lifestyle, and since he became ill had not visited him. While somewhat familiar with AIDS through the media, he had little understanding of the illness itself, and complained that it had not been explained to him in the hospital.

The patient initially related in a hostile, demanding and rather dramatic manner. As the initial interview progressed, however, he became more pleasant and cooperative. He appeared anxious and complained of trouble sleeping in the hospital. There were no other vegetative symptoms of depression, and no other signs of major psychopathology. The clinical impression was of a generalized anxiety disorder, exacerbated by multiple recent stresses. He responded positively to supportive psychotherapy and no medications were recommended.

His medical condition steadily deteriorated in spite of all treatment. He was seen regularly for psychotherapy during this period. He became more anxious and depressed as his medical condition worsened. As the illness progressed he utilized more of the hospital support systems, especially the pastoral care service. He died from overwhelming sepsis three months after admission.

**Case 2** was a 31-year-old black homosexual male who was admitted to the hospital because of persistent cough, shortness of breath, fever and weight loss. He stated that he had these symptoms for two months, but did not seek treatment because he thought "it was only a cold and would go away." Medical work-up estab-

lished the diagnosis of *P. carinii* pneumonia. This combined with hematologic abnormalities led to the diagnosis of AIDS. The patient stated that he had been in good health up to two months prior to admission, and denied knowledge of contact with anyone exposed to AIDS.

Psychiatric consultation was initiated at the patient's request because he wanted "someone to talk to." He expressed fears concerning his illness and its prognosis, as well as difficulty in dealing with an illness that he said "came out of the blue." He was particularly fearful that he would lose his job if his employer found out that he had AIDS. He displayed mixed features of anxiety and depression, but without vegetative symptoms. No other psychiatric symptoms were noted. He had no previous psychiatric history. The clinical impression was of an adjustment disorder with mixed emotional features.

His condition improved considerably with antibiotic treatment, and his hematologic status stabilized to the point where he could be discharged. He was to be followed by the medical service, and was also given an appointment in the mental health clinic. The patient failed all appointments and was lost to follow-up.

### **Review of Patient and Staff Reactions**

The two cases presented evoked many reactions, often intense in nature. There were also a number of similarities in the two cases. These issues will be described in the present section.

Of note is the fact that both consultations were initiated by the patients. This may reflect the failure of those involved in the treatment to recognize the intensity of the feelings that both patients experienced. It may also be related to the resistance of the staff to deal with these issues, as well as the resistance toward looking at their own feelings.

Both patients experienced anxiety related to their illness, which was compounded by their feeling that the illness had not been explained to them. The patients dealt with this in a similar manner, by asking more questions and ultimately by making more demands of the staff. They quickly became angry and frustrated with the staff's lack of response. This anger, in turn, served to alienate the treatment teams. When asked how the staff responded to his questions, one patient said, "They don't take me seriously." The other patient experienced similar feelings saying, "They talk among themselves, but never tell me anything."

Related to the communication problems was the confusion expressed by both patients about who was in

charge of the treatment. Several medical consultants were involved in the treatment of each patient, but both patients complained that the consultants were never differentiated from the primary treatment team. The anonymity of the treatment team was complicated by uncertainty among the staff as to precautions against contamination. The result was the excessive use of masks and gowns which further obscured identity. As one patient poignantly remarked, "I must be really sick if all these people need to see me." Later he described "feeling like a freak" because of the number of housestaff and students who came to examine him. He once said that he thought that the staff acted as if they were frightened of him. This was certainly, in part, a projection of his own fears, but also a valid observation of the distance the staff maintained and their failure to respond.

As mentioned, both patients responded to their anxiety by asking more questions, often in an angry and demanding manner. Their denial of the illness may have been reflected in the number of questions asked, and in their anger at not being responded to in the way they expected. The consultant, however, did observe considerable distance maintained by the staff. This distance only increased the feelings of isolation already experienced by the patients because of the nature of their illness.

The medical and nursing staff both expressed strongly negative feelings toward the patients. Each patient was treated at a different time and by different personnel, yet the responses were strikingly similar. They were quickly identified as problem patients. Staff openly described both patients as hostile, demanding and immature. When asked why patient #1 was viewed as a problem, one staff member replied, "He wants too much from me." Another said of the second patient, "I dread it when he rings his call button...because he asks questions I can't answer." These statements reflect the frustration that comes from treating seriously ill patients with intractable illnesses. The frustration was not recognized as such, however, leading to intensely negative feelings toward the patient that were out of proportion to the observed situation.

Aside from the negative feelings expressed toward the patients, the staff refused to discuss their feelings. Any anxiety or fear experienced by them was acted out rather than dealt with directly. The psychiatric consultant was viewed as someone there to "do something with" these patients rather than help both sides deal more effectively with the situation. This was another

indication of their resistance and their wish that the problem would go away. The overall result was a breakdown in communication and a failure on the part of the staff to understand the issues that confronted both patients.

### **Discussion**

The cases presented illustrate some of the problems that can be encountered in the treatment of AIDS patients. There were, as indicated, many similarities in the cases. Some of the reactions are similar to those observed with other terminally ill patients, for example cancer patients. There was, however, an intensity to the reactions that may be unique to an affect-laden illness such as AIDS.

Both patients experienced anxiety and alienation during their hospitalizations. Staff support has been found to be essential in the treatment of AIDS patients because of their vulnerability to these feelings.<sup>5</sup> Because the patients felt unsupported and even rejected by the staff, they were unable to effectively deal with their illness. This in turn led to patient behaviors which were identified by the staff as negative. The lack of staff support and feelings of perceived rejection may also have played a role in the patient's failure to return for follow-up. Kimball has identified phases of illness that must be dealt with by both patients and staff.<sup>7</sup> Failure to effectively work through these stages leads to conflict between the patient and the staff, as well as to the so-called "acting out" behaviors seen in these two cases. In addition to appropriate medical treatment, one goal of the treating staff should be to assist the patients in facing and accepting the illness, as well as in restructuring their lives in accordance with the realities of the illness.<sup>5</sup>

The negative feelings of the staff appeared to be influenced by a number of factors. These include feelings of frustration and helplessness related to the lack of effective medical treatment for AIDS, lack of understanding of the disease itself, and fears about contracting the disease. Finally, unconscious factors related to attitudes toward a homosexual lifestyle must be considered.

There have been previous reports of AIDS patients admitted to psychiatric units, and the complex staff reactions that followed.<sup>8,9</sup> These can be generalized to apply to staff on medical services as well. Among the reactions reported include a reluctance of health care personnel to work with AIDS patients. One study reported from 64-73% of staff expressed fears about



catching AIDS, misconceptions about how the disease is transmitted, and moderate to severe anxiety about approaching AIDS patients.<sup>8</sup> The fears about catching the disease and increased anxiety about approaching the patients can be understood as contributing to the sense of isolation experienced by the patients. Misconceptions about the illness would also account, in part, for the patients feeling that their questions were not responded to. Thus both patient and staff issues contributed to the problems encountered. Another report described the strong negative feelings experienced by the staff toward AIDS patients. The patients were felt to be disruptive to the ward milieu. These feelings were accompanied by fear and avoidance of the patients, and by an increase in somatic complaints by the staff.<sup>9</sup> Some literature has been contradictory regarding both the risk of contracting the disease and precautions that should be taken.<sup>10,11</sup> This confusion serves to strengthen negative feelings toward AIDS patients. Other reports outline realistic precautions to be taken but fail to address the feelings aroused by caring for these patients.<sup>12</sup> Those staff members who appear to experience low levels of anxiety may in fact be suppressing their anxiety, a phenomenon which has been reported elsewhere.<sup>13</sup> It is probably unrealistic to expect staff to work with AIDS patients without fear or anxiety, therefore it is important to recognize and develop better ways of dealing with these feelings, and to improve the availability of factual information about the disease.<sup>8</sup>

The consultation-liaison psychiatrist can be of great value in helping both patients and staff to deal with this illness. Lipowski has reported on the various roles the consultation-liaison psychiatrist can play with regard to both patients and staff.<sup>14</sup> The psychiatrist can be of use in helping both parties to deal with the various phases of illness and their accompanying tasks.<sup>5,7</sup> Recognition of both transference and countertransference reactions by the psychiatrist can also help minimize conflict. It has been reported useful to have someone present during initial medical visits who can interpret to the patient the medical explanation of the illness, and identify potential sources of misunderstanding by both patients and staff.<sup>5</sup> The consultant could then process this material with both groups. Attitudes and behavior could be constantly examined with the goal of

maintaining communication. This is essential in an affect-laden illness such as AIDS where both conscious and unconscious feelings are activated.<sup>5,14</sup> Finally, the psychiatrist can help physicians and nursing staff deal with the many demands and stresses associated with the care of a critically ill patient.<sup>7,9</sup>

## Summary

AIDS patients present difficult management problems. Not only are they relatively resistant to medical treatment, but they also present significant problems regarding psychological adjustment and adaptation in both patients and staff. Psychiatric consultation can be helpful, and should be offered to all patients with this illness during the initial phase of medical treatment before conflicts arise. The consultant can be helpful to the patient in accepting and dealing with the illness, in identifying and clarifying patient-staff conflicts, and in providing the staff with assistance in understanding their feelings. This could be especially useful in neutralizing bias toward patients with this illness. These steps can enhance and facilitate the treatment of this group of patients.

**References** 1. Fauci AS, Macher AM, Longo DL, et al: Acquired Immunodeficiency Syndrome – Epidemiologic, Clinical, Immunologic and Therapeutic Considerations. *Ann Int Med* 100:92–106, 1984. 2. Waterson AP: Acquired Immune Deficiency Syndrome. *Br Med J* 286:743–746, 1983. 3. Hoffman RS: Neuropsychiatric Complications of AIDS. *Psychosomatics* 25:393–400, 1984. 4. Nurnberg HG, Prudic J, Fiori M, et al: Psychopathology Complicating Acquired Immune Deficiency Syndrome (AIDS). *Am J Psychiatry* 141:95–96, 1984. 5. Nichols SE: Psychiatric Aspects of AIDS. *Psychosomatics* 24:1083–1089, 1983. 6. Holtz H, Dobro J, Palinkas R, et al: Psychosocial Impact of Acquired Immune Deficiency Syndrome. *JAMA* 250:167, 1983. 7. Kimball CP: Reactions to Illness – The Acute Phase. *Psychiatr Clin North Am* 2:307–319, 1979. 8. Rosse RB: Reactions of Psychiatric Staff to an AIDS Patient. *Am J Psychiatry* 142:523, 1985. 9. Plan HJ, Hellerstein D, Amchin J: Impact of AIDS-Related Cases on an Implant Therapeutic Milieu. *Hosp Community Psychiatry* 36:173–176, 1985. 10. Popkin B, Madden P, Laurich P, et al: Caring for the AIDS Patient – Fearlessly. *Nursing '83* 13:9, 50–55, 1983. 11. Apuzzo-Berger D: AIDS-Could You be at Risk? *RN* 46:2, 67–78, 1983. 12. Editorial: Hospitals Stepping Up Effort to Protect Staff from AIDS. *Am J Nursing* 83:1468–1482, 1983. 13. Lanza ML: A Follow Up Study of Nurses Reactions to Physical Assault. *Hosp Community Psychiatry* 35:492–494, 1984. 14. Lipowski ZJ: Consultation Liaison Psychiatry – An Overview. *Am J Psychiatry* 131:623–630, 1974.

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**CLINICAL PHARMACOLOGY.** INDERAL is a nonselective, beta-adrenergic receptor-blocking agent possessing neither autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retreatment upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL, as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE.** **Hypertension:** INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** INDERAL LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and INDERAL LA is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first-degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

**WARNINGS.** **CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE.** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOGLYCEMIA.** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing  $T_4$  and reverse  $T_3$  and decreasing  $T_3$ .

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS.** **GENERAL.** Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should

be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**CLINICAL LABORATORY TESTS.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytoin, phenobarbital, and nifedipine accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected  $T_3$  concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY.** Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS.** INDERAL is excreted in human milk. Caution should be exercised when INDERAL (propranolol HCl) is administered to a nursing woman.

**PEDIATRIC USE.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** Light-headedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, vivid dreams, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy and vivid dreams appear dose related.

**Gastrointestinal:** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** Bronchospasm.

**Hematologic:** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-Immune:** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSAGE AND ADMINISTRATION.** INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL Tablets to INDERAL LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg-for-mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg INDERAL LA once daily.**

**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. INDERAL LA National Compliance Evaluation Program. Data on file, Ayerst Laboratories.
2. Ravid M, Lang R, Jutrin I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985; 145:1321-1323.

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**Ayerst**

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New York, NY 10017

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## Advertisement

**A**dvertising: is it good or bad? The question will not be settled, if ever, here.

In my early youth, I experienced what may have been the first public advertisement for a real antibacterial agent. I was on the precipice of a world I had never dreamed before existed: love. During these first weeks of my new and tentative life I was attacked repeatedly and unfairly by a more imaginatively diabolic and cruel double whammy than any young man, pure of heart and innocent of the world's indifference, should be required to endure. I would encounter in my scholastic and embryonic social life a girl of unspeakable beauty and gracious personal magnetism. For an agonizing period I would struggle to obtain her permission to take her out for the evening, a date! Then I would campaign for the use of my father's long, black 1939 Pontiac. Thus, I arrive. I enter. Her mother says, "I am very pleased to meet you! Your father delivered Bev-

erly!" With the head forced up and face looking away to hide the sweaty blush, I install her properly into the Pontiac. The engine is started and the radio warming up, a phenomenon of the day. Without warning the radio screams, "Syphilis can be cured! Go get your penicillin shot NOW!"

Is advertising bad? Cancer is bad and in the absence of a really effective agent against cancer, education and advertising are our only weapons to prevent it. Tobacco and the sun are our most notorious carcinogens, a very interesting group. Smoke has no redeeming artistic or social value. The sun has great artistic and social influences, not the least of which is that without the sun we would all be very cold and very dead. The withholding of advertisement for tobacco can only be applauded even though we recognize that this is little, if any, effective. One can avoid the sun's carcinogen with sweaters and screens, and obtain his vitamin

B12 through a needle like the one that saved him from syphilis, just as effective if a lot less fun.

Is advertising good? AIDS is bad and in the absence of a really effective agent against AIDS, education and advertising are our only weapons to prevent it. Against this most modern and virulent scourge, the ancient, depraved, shunned condom is currently the most effective barrier unless we can persuade some millions of our young and old to subscribe to a Shaker vow. Should condom advertising be taken from the men's room coin dispenser of the highways of Louisiana and dignified by the advertisements of television, radio, newspapers and magazines?

Yes. After all these years of signs on the package and the dispenser, finally the condom is for the prevention of disease only. The art of birth control is exquisitely better developed than the art of curing AIDS.

**A. Evan Overstreet, M.D.**  
**Editor**



# CHANGING ADDRESS?

Please let us know at least  
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ing your address.

Send new address to:

Journal of the Kentucky  
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## **LIBRIUM®**

**chlordiazepoxide HCl/Rache**

**5-mg, 10-mg, 25-mg capsules**

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Management of anxiety disorders; short-term relief of anxiety symptoms, acute alcohol withdrawal symptoms, preoperative apprehension and anxiety. Usually not required for anxiety or tension associated with stress of everyday life. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms (including convulsions) reported after abrupt cessation of extended use of excessive doses are similar to those seen with barbiturates. Milder symptoms reported infrequently when continuous therapy is abruptly ended. Avoid abrupt discontinuation; gradually taper dosage.

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants, causal relationship has not been established clinically. Due to isolated reports of exacerbation, use with caution in patients with porphyria.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. **Oral—Adults.** Mild and moderate anxiety disorders and symptoms, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d.* **Geriatric patients:** 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

**Supplied:** Librium® (chlordiazepoxide HCl/Rache) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in boxes of 4 reverse-numbered cards of 25, and in boxes containing 10 strips of 10. Libritabs® (chlordiazepoxide/Rache) Tablets, 5 mg and 10 mg—bottles of 100 and 500; 25 mg—bottles of 100. With respect to clinical activity, capsules and tablets are indistinguishable.

P 1. 0286



Rache Products Inc.  
Manati, Puerto Rico 00701

In Kentucky, when you decide to prescribe Librium,

# To protect your decision...

Rx

*Do Not Substitute*

## You do this.

# Librium

5-mg, 10-mg, 25-mg capsules

brand of

chlordiazepoxide HCl/Roche <sup>®</sup>

**nobody does it better!**



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Please see adjacent page for a summary of product information.





Kentucky's Gubernatorial candidates were the luncheon guests during the PLI conference. Local television stations covered the event.

## *"Competitive Interdependence"*

# KMA Sponsors PLI Program

Professional Liability Insurance continues to be the major issue facing medicine. To help physicians deal more effectively with the problem, KMA presented a two-day seminar entitled, "Competitive Interdependence." Guest speakers chosen for the program were experts in the many diverse areas of the liability problem from legislative reform to marketing techniques.

The 146 guests attending the meeting listened to Representative Jody Richards (D), House of Representatives, Caucus Chairman, who explained the importance of physician involvement in the legislative arena and the best way to ensure effectiveness. His suggestions centered around the fact that the Legislative branch responds to

the wish of constituents. To be effective, Rep. Richards stressed the importance of making appointments with legislators; being present at Committee hearings to present ideas in a formal way; holding informal group meetings for presentation of ideas and making phone calls and writing letters.

Rep. Richard's advice to KMA was to continue ongoing programs of information and education for legislators to keep them informed of the issues and most importantly, not to limit lobbying efforts to only times of crisis, but to keep lines of communication open at all times.

Another guest speaker, B.J. Anderson, J.D., AMA Associate General Counsel, gave her presentation on Ethics of Quality Care vs. Economic Constraints of



KMA President Richard F. Hench, M.D., Lexington, was one of the guest speakers.



KMA members and spouses across Kentucky attended the conference held at the Hyatt Regency Hotel in Lexington.





Jeffrey O'Connell, J.D., Professor of Law, University of Virginia



Rep Jody Richards (D), Caucus Chairman



Jeffrey Denning, Conomikes Associates, Marina Del Ray, CA

Cost Containment." She explained that "America is perceived as having the highest quality of medical care in the world. There are trends occurring though that may affect physician care. Patients perceive that cost containment programs may curtail their access to certain services." She continues, "Pressures of litigation make it more

difficult for physicians to carry out objective, responsible peer review and still not be subjected to a great deal of litigation."

Marketing is another approach to dealing with litigation. Jeffrey Denning, from Conomikes Associates, spoke on "Enhancing your image/marketing your practice." Denning admitted that many physi-

cians are angry that they even have to think about marketing, and that marketing alone cannot keep anyone out of court. He continued, "Marketing at its very basis is practicing good medicine in a nice way. . . It is a way of affecting the patient's perception of the doctor."

This perception of physicians was questioned in an AMA/Harris



Nelson B. Rue, M.D., KMA Chairman of the Board, gave a presentation entitled, "Evolution of Alternate Delivery Systems in Kentucky."



John S. Zapp, D.D.S., Director, Washington Office, AMA



Wally O. Montgomery, M.D., Chairman, KMA Ad Hoc Committee on Professional Liability Insurance.

poll according to Denning, that asked patients to rate the honesty and ethics of various professions. Fifty-two percent of the respondents believed physicians were ethical and honest in their practice. In the same survey, patients indicated that their main complaint in dealing with physicians was the amount of time spent in the waiting room (77%) followed by fees being unreasonably high (75%) and patients not being involved in health care decisions (67%).

Dealing with these issues using what Denning calls "internal marketing" is giving the patients the good service they want. In his conclusion he stated, "What is marketing? The sum of everything you do."

J. Kelly Avery, M.D., continued along the same line of thought in his presentation on Medical Malpractice Prevention. Dr. Avery, Medical Director for CME at St.

Thomas Hospital in Nashville stated that they had conducted a survey of defense attorneys asking them to conclude from their cases the single most important cause of a lawsuit. The findings stated that the vast majority of lawsuits are caused by poor communication and the general perception from patients was that physicians did not spend enough time giving explanations. Dr. Avery went on to explain, "Lack of information leads to anxiety, stress, lack of trust and anger. The very methods we use to treat people now are more dehumanizing than we imagine and our physical presence is even more important than it ever has been."

Cassette tapes of all guest speakers including the luncheon presentation of the Kentucky gubernatorial Candidates are available from Convention Record, Box 43432, Louisville, KY 40243, (502) 245-7981.





Wally O. Montgomery, M.D., (L) with Gubernatorial candidate Julian Carroll (D).



From left to right: Nelson B. Rue, M.D., candidate James S. Brashear (D) and Harold L. Bushey, M.D., KEMPAC Chairman.



Thomas R. Watson, M.D., KMA Vice President (L) and candidate Grady Stumbo, M.D., (D).



Donald C. Barton, M.D., (L) and candidate John Harper (R).

140

120

100

80

60

40

20

0

130

110

90

70

50

30

10

In mild to moderate hypertension

**THE FIRST  
ONCE DAILY**

**CALCIUM  
CHANNEL  
BLOCKER...**



**NEW**  
ONCE DAILY



# ISOPTIN<sup>®</sup> SR<sup>\*</sup>

(verapamil HCl/Knoll)

240 mg scored, sustained-release tablets



**JAMES B.**  
38, black male, heavy smoker. Prescribed a diuretic by another physician last year for hypertension.

**YOUR CONCERNS**

Presents with "smoker's cough." Workup reveals a BP of 150/107.

**A LOGICAL CHOICE FOR CONTROL OF HIS BP**

ISOPTIN<sup>®</sup> (verapamil HCl/Knoll) because...

- Black hypertensives often have low plasma renin activity and generally do not respond favorably to beta blockers.
- Beta blockers may increase the likelihood of bronchospasm.

**ALICE W.**  
65, diabetic, overweight. Her BP has elevated to 190/98.

**YOUR CONCERNS**

She's on daily insulin.

**A LOGICAL CHOICE FOR CONTROL OF HER BP**

ISOPTIN<sup>®</sup> (verapamil HCl/Knoll) because...

- Unlike most beta blockers and diuretics, ISOPTIN has no adverse effects on serum glucose levels.
- Unlike most beta blockers, ISOPTIN does not mask the symptoms of hypoglycemia.



**THOMAS G.**  
70, asthmatic. In the past, BP adequately controlled with 25 mg hydrochlorothiazide daily.

**YOUR CONCERNS**

Today patient presents with symptoms of gout. Workup reveals high uric acid level, low serum potassium, and BP elevated to 180/98.

**A LOGICAL CHOICE FOR CONTROL OF HIS BP**

ISOPTIN<sup>®</sup> (verapamil HCl/Knoll) because...

- Unlike diuretics, ISOPTIN will not decrease serum potassium levels or elevate uric acid levels.
- Unlike beta blockers, ISOPTIN can be used safely in asthma and COPD patients.

**JOHN K.**  
42, Annual physical uncovered diastolic BP of 102... confirmed on three successive office visits. Unresponsive to nonpharmacologic intervention.

**YOUR CONCERNS**

Salesman, spends many hours of his working day in car... total cholesterol level 300, HDL 35.

**A LOGICAL CHOICE FOR CONTROL OF HIS BP**

ISOPTIN<sup>®</sup> (verapamil HCl/Knoll) because...

- Unlike diuretics, ISOPTIN does not cause urinary urgency.
- Unlike either beta blockers or diuretics, ISOPTIN will not adversely affect his already seriously compromised lipid profile.
- Unlike with propranolol, fatigue and impotence are rarely reported.



**Antihypertensive therapy you  
and your patients can live with**

\*A product of Knoll research.

**In mild to moderate hypertension**  
**THE FIRST ONCE DAILY**  
**CALCIUM CHANNEL BLOCKER**

Brief Summary

**ISOPTIN® SR**  
**(verapamil HCl/Knoll)**  
**240 mg scored, sustained-release tablets**

**CONTRAINDICATIONS:** 1) Severe left ventricular dysfunction (see WARNINGS), 2) Hypotension (less than 90 mmHg systolic pressure) or cardiogenic shock, 3) Sick sinus syndrome or 2nd or 3rd degree AV block (except in patients with a functioning artificial ventricular pacemaker).

**WARNINGS:** **Heart Failure:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (see DRUG INTERACTIONS). Patients with milder ventricular dysfunction should, if possible, be controlled before verapamil treatment. Hypotension: ISOPTIN (verapamil HCl) may produce occasional symptomatic hypotension. Elevated Liver Enzymes: Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Periodic monitoring of liver function in patients receiving verapamil is therefore prudent. Accessory Bypass Tract (Wolff-Parkinson-White): Patients with paroxysmal and/or chronic atrial flutter or atrial fibrillation and a coexisting accessory AV pathway have developed increased antegrade conduction across the accessory pathway producing a very rapid ventricular response or ventricular fibrillation after receiving intravenous verapamil. While this has not been reported with oral verapamil, it should be considered a potential risk. Treatment is usually D.C.-cardioversion. Atrioventricular Block: The effect of verapamil on AV conduction and the SA node may cause asymptomatic 1st degree AV block and transient bradycardia. Higher degrees of AV block, while infrequent (0.8%), may require a reduction in dosage or, in rare instances, discontinuation of verapamil HCl. Patients with Hypertrophic Cardiomyopathy (IHSS): Although verapamil has been used in the therapy of patients with IHSS, severe cardiovascular decompensation and death have been noted in this patient population.

**PRECAUTIONS:** **Impaired Hepatic or Renal Function:** Verapamil is highly metabolized by the liver with about 70% of an administered dose excreted in the urine. In patients with impaired hepatic or renal function verapamil should be administered cautiously and the patients monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacological effects (see OVERDOSAGE).

**Drug Interactions:** **Beta Blockers:** Concomitant use of ISOPTIN and oral beta-adrenergic blocking agents may be beneficial in certain patients with chronic stable angina or hypertension, but available information is not sufficient to predict with confidence the effects of concurrent treatment in patients with left ventricular dysfunction or cardiac conduction abnormalities. **Digitalis:** Clinical use of verapamil in digitalized patients has shown the combination to be well tolerated if digoxin doses are properly adjusted. However, chronic verapamil treatment increases serum digoxin levels by 50 to 75% during the first week of therapy and this can result in digitalis toxicity. Upon discontinuation of ISOPTIN (verapamil HCl), the patient should be reassessed to avoid underdigitalization. **Antihypertensive Agents:** Verapamil administered concomitantly with oral antihypertensive agents (e.g., vasodilators, angiotensin-converting enzyme inhibitors, diuretics, beta blockers, prazosin) will usually have an additive effect on lowering blood pressure. Patients receiving these combinations should be appropriately monitored. **Disopyramide:** Disopyramide should not be administered within 48 hours before or 24 hours after verapamil administration. **Quinidine:** In patients with hypertrophic cardiomyopathy (IHSS), concomitant use of verapamil and quinidine resulted in significant hypotension. There has been a report of increased quinidine levels during verapamil therapy. **Nitrates:** The pharmacologic profile of verapamil and nitrates as well as clinical experience suggest beneficial interactions. **Cimetidine:** Two clinical trials have shown a lack of significant verapamil interaction with cimetidine. A third study showed cimetidine reduced verapamil clearance and increased elimination to 1/2. **Anesthetic Agents:** Verapamil may potentiate the activity of neuromuscular blocking agents and inhalation anesthetics. **Carbamazepine:** Verapamil may increase carbamazepine concentrations during combined therapy. **Rifampin:** Therapy with rifampin may markedly reduce oral verapamil bioavailability. **Lithium:** Verapamil may lower lithium levels in patient on chronic oral lithium therapy. **Carcinogenesis, Mutagenesis, Impairment of Fertility:** There was no evidence of a carcinogenic potential of verapamil administered to rats for two years. Verapamil was not mutagenic in the Ames test. Studies in female rats did not show impaired fertility. Effects on male fertility have not been determined. **Pregnancy (Category C):** There are no adequate and well-controlled studies in pregnant women. ISOPTIN crosses the placental barrier and can be detected in umbilical vein blood at delivery. This drug should be used during pregnancy, labor, and delivery, only if clearly needed. **Nursing Mothers:** ISOPTIN is excreted in human milk, therefore, nursing should be discontinued while verapamil is administered. **Pediatric Use:** Safety and efficacy of ISOPTIN in children below the age of 18 years have not been established.

**ADVERSE REACTIONS:** Constipation 8.4%, dizziness 3.5%, nausea 2.7%, hypotension 2.5%, edema 2.1%, headache 1.9%, CHF/pulmonary edema 1.8%, fatigue 1.7%, bradycardia 1.4%, 3° AV block 0.8%, flushing 0.1%, elevated liver enzymes (see WARNINGS). The following reactions, reported in less than 1.0% of patients, occurred under conditions (open trials, marketing experience) where a causal relationship is uncertain; they are mentioned to alert the physician to a possible relationship: angina pectoris, arthralgia and rash, AV block, blurred vision, cerebrovascular accident, chest pain, claudication, confusion, diarrhea, dry mouth, dyspnea, ecchymosis or bruising, equilibrium disorders, exanthema, gastrointestinal distress, gingival hyperplasia, gynecomastia, hair loss, hyperkeratosis, impotence, increased urination, insomnia, macules, muscle cramps, myocardial infarction, palpitations, paresthesia, psychotic symptoms, purpura (vasculitis), shakiness, somnolence, spotty menstruation, sweating, syncope, urticaria. **Treatment of Acute Cardiovascular Adverse Reactions:** Whenever severe hypotension or complete AV block occur following oral administration of verapamil, the appropriate emergency measures should be applied immediately, e.g., intravenously administered isoproterenol HCl, levarterenol bitartrate, atropine (all in the usual doses), or calcium gluconate (10% solution). If further support is necessary, inotropic agents (dopamine or dobutamine) may be administered. Actual treatment and dosage should depend on the severity and the clinical situation and the judgment and experience of the treating physician.

**OVERDOSAGE:** Treatment of overdosage should be supportive. Beta-adrenergic stimulation or parenteral administration of calcium solutions may increase calcium ion flux across the slow channel, and have been used effectively in treatment of deliberate overdosage with verapamil. Clinically significant hypotensive reactions or fixed high degree AV block should be treated with vasopressor agents or cardiac pacing, respectively. Asystole should be handled by the usual measures including cardiopulmonary resuscitation.

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**Health and Safety Tip From**  
**the American Medical Association**

**MARKERS LISTED TO**  
**IDENTIFY ALCOHOLICS**

**How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?**

**The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.**

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.
2. Drinking to handle problems or relieve symptoms.
3. Obvious preoccupation with alcohol and the frequent need to have a drink.
4. Surreptitious drinking or gulping of drinks.
5. Tendency toward making alibis and weak excuses for drinking.
6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.
7. Frequent absenteeism from the job, especially following weekends and holidays.
8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.
9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.
10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.
11. Multiple contacts with the health care system with disorders that are alcohol caused or related.
12. Persistent marital and family problems, perhaps with multiple marriages.
13. History of arrests for drunkenness or drunken driving.

*Submitted by the KMA Impaired Physicians' Committee*



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For your brochures or other information about Lithotripsy and our kidney stone treatment program, call CAMC: in West Virginia at 1-800-654-0159; from out of state, call 304-340-7315.

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- \_\_\_\_# 4 KMA PR Campaign For Tort Reform – Jessica Schikler / Tom Preston
- \_\_\_\_# 5 Medical Malpractice: The next five years – Carl Wedekind, Jr. J.D.
- \_\_\_\_# 6 Candidates For Governor
- \_\_\_\_# 7 Evolution of Alternate Delivery Systems in Kentucky – Nelson Rue, M.D.
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# Practice Management Workshops Filled, More Scheduled

Over 200 physicians, spouses and office personnel attended KMA's practice management workshops held during March in Lexington and Louisville.

The fifth KMA "How to Get Started in Medical Practice" Seminar, held for the first time in Lexington, was felt to be a "worthwhile member benefit" by the 30 attendees. Presented by Conomikes Associates, the two-day workshop dealt with personnel, marketing, collections, medical records and practice alternatives. Another workshop will be scheduled in the fall of 1987.

The two workshops on "Third Party Reimbursement and Coding," held March 12 in Lexington and March 13 in Louisville, were both filled to capacity. An evaluation of the workshops can be summed up by a response of one of the participants, "I've had my CPT-4 and ICD-9 books for over a year; now I know how to use them."



Jeff Denning, General Manager and Staff Associate, Conomikes Associates, spoke to physicians attending the KMA "How to Get Started in Medical Practice" Seminar on March 10-11 at the Hyatt Regency in Lexington.

## June Workshops Scheduled

Due to the large number of people on a waiting list for the insurance coding workshops, a second series has been scheduled as follows:

Tuesday, June 23, 1987 — Marriott Griffin Gate, Lexington

Wednesday, June 24, 1987 — Executive Inn, Owensboro

Thursday, June 25, 1987 — Jefferson County Medical Society Office, Louisville

A workshop fee of \$155 includes a luncheon and workbook. Registration for the workshops, which will run from 9 a.m. to 4 p.m., may be made by contacting the KMA Office at (502) 459-9790.



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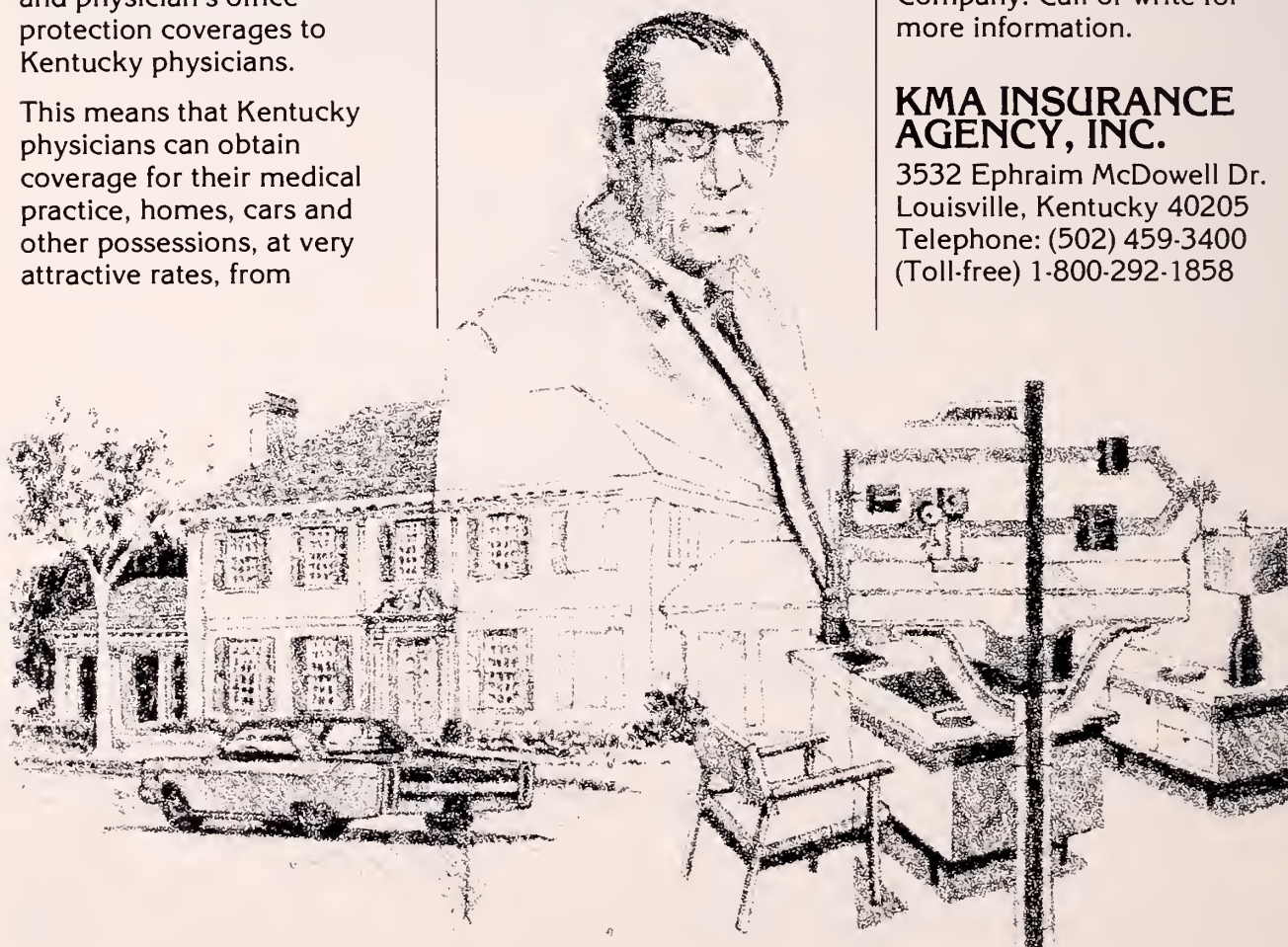
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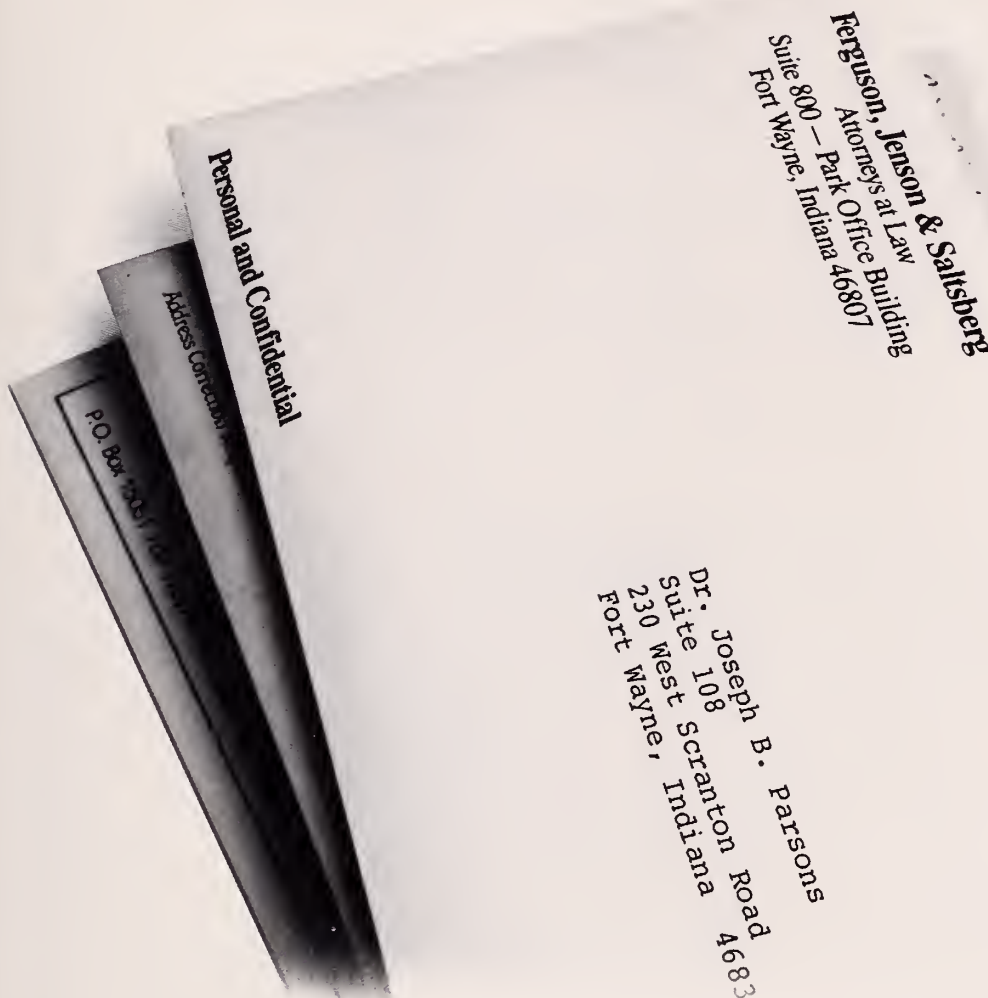
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Keflet is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-sensitive patients.

**Brief Summary.** Consult the package literature for prescribing information.  
**Indications and Usage:** Keflet<sup>TM</sup> Tablets (cephalexin, Dista) are indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms.

Respiratory tract infections caused by *Streptococcus pneumoniae* and group A  $\beta$  hemolytic streptococci (Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. Keflet is generally effective in the eradication of streptococci from the nasopharynx; however, substantial data establishing the efficacy of Keflet in the subsequent prevention of rheumatic fever are not available at present.)

Otitis media due to *S. pneumoniae*, *Haemophilus influenzae*, staphylococci, streptococci, and *Nisseria catarrhalis*

Skin and skin structure infections caused by staphylococci and/or streptococci

Bone infections caused by staphylococci and/or *Proteus mirabilis*  
Genitourinary tract infections, including acute prostatitis, caused by *Escherichia coli*, *P. mirabilis*, and *Klebsiella sp.*

**Note:**—Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

**Contraindication:** Keflet is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

**Warnings:** BEFORE CEPHALEXIN THERAPY IS INSTITUTED, CAREFUL INQUIRY SHOULD BE MADE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO CEPHALOSPORINS AND PENICILLIN. CEPHALOSPORIN C DERIVATIVES SHOULD BE GIVEN CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS.

SERIOUS ACUTE HYPERSENSITIVITY REACTIONS MAY REQUIRE EPINEPHRINE AND OTHER EMERGENCY MEASURES.

There is some clinical and laboratory evidence of partial cross allergenicity of the penicillins and the cephalosporins. Patients have been reported to have had severe reactions (including anaphylaxis) to both drugs.

Any patient who has demonstrated some form of allergy, particularly to drugs, should receive antibiotics cautiously. No exception should be made with regard to Keflet.

Pseudomembranous colitis has been reported with virtually all broad spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

**Usage in Pregnancy:**—Safety of this product for use during pregnancy has not been established.

**Precautions:** *General:*—Patients should be followed carefully so that any side effects or unusual manifestations of drug idiosyncrasy may be detected. If an allergic reaction to Keflet occurs, the drug should be discontinued and the patient treated with the usual agents (eg, epinephrine or other pressor amines, antihistamines, or corticosteroids).

Prolonged use of Keflet may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Keflet should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

Indicated surgical procedures should be performed in conjunction with antibiotic therapy.

As a result of administration of Keflet, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (Glucose Enzymatic Test Strip, USP, Lilly).

Broad spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

**Usage in Pregnancy—Pregnancy Category B:**—The daily oral administration of cephalexin to rats in doses of 250 or 500 mg/kg prior to and during pregnancy, or to rats and mice during the period of organogenesis only, had no adverse effect on fertility, fetal viability, fetal weight, or litter size. Note that the safety of cephalexin during pregnancy in humans has not been established.

Cephalexin showed no enhanced toxicity in weanling and newborn rats as compared with adult animals. Nevertheless, because the studies in humans cannot rule out the possibility of harm, Keflet should be used during pregnancy only if clearly needed.

**Nursing Mothers:**—The excretion of cephalexin in the milk increased up to 4 hours after a 500 mg dose, the drug reached a maximum level of 4  $\mu$ g/mL, then decreased gradually, and had disappeared 8 hours after administration. Caution should be exercised when Keflet is administered to a nursing woman.

**Adverse Reactions:** *Gastrointestinal:*—Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely. The most frequent side effect has been diarrhea. It was very rarely severe enough to warrant cessation of therapy. Dyspepsia and abdominal pain have also occurred. As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

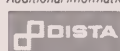
**Hypersensitivity:**—Allergic reactions in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens Johnson Syndrome, or toxic epidermal necrolysis have been observed. These reactions usually subsided upon discontinuation of the drug. Anaphylaxis has also been reported.

Other reactions have included genital and anal pruritus, genital moniliasis, vaginitis and vaginal discharge, dizziness, fatigue, and headache. Eosinophilia, neutropenia, thrombocytopenia, and slight elevations in SGOT and SGPT have been reported.

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## CME Committee and Council Hold Joint Meeting

On February 22, a joint meeting of the CME Committee and CME Council was held to review the CME accreditation process. The Committee is responsible for accrediting institutions that sponsor CME programs and the Council is charged with overseeing all programs KMA provides. Of major concern have been recent changes to the accreditation process required by the Accreditation Council for Continuing Medical Education (ACCME), the national organization that accredits all medical associations. The joint Committee/Council considered these changes and established a review schedule for the year for in-state groups KMA accredits. The joint group also had further discussion of mandatory participation in CME activities as a condition of licensure. They will make a recommendation to the House of Delegates in September on this issue.



Members of the CME Committee and Council from left to right: John Johnstone, M.D., Richmond; Michael Daughtery, M.D., Lexington; Bruce Stapleton, M.D., Ashland; Charles M. Brohm, M.D., Prospect; Paul J. Sides, M.D., Lancaster; James S. Baumgarten, M.D., Louisville and Chairman James E. Redmon, Jr., M.D., Louisville. Not shown in photo are Alfred Thompson, M.D., Louisville and Constance Fulmer, Ph.D., Lexington.

## KMA Members Benefit from New Workmen's Comp Plan

Physicians participating in the Workmen's Compensation Plan, provided by KMA as a member benefit, recently received a return of almost 40% on the premium they paid for the period ending January 1, 1987. The return, which ranged from \$2 to \$350 per enrollee, was based on claim experience of the group, the participant's number of employees and length of time enrolled. Overall, more than \$2,600 was distributed.

Approved by KMA in late 1985 as an opportunity for its members to obtain Workmen's Compensation coverage under a group policy, the Plan is administered by Casualty Reciprocal Exchange, a member of the Dodson Insurance Group. If you would like further information about the Plan, call Dodson toll-free at 1-800-821-3760.



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## KMA Receives Membership Award



KMA President Richard F. Hench, M.D. (left) and Nelson B. Rue, M.D., KMA Chairman of the Board (right) accept the 1986 AMA Membership Award from William S. Hotchkiss, M.D. AMA President-Elect. The award is presented each year during the AMA Leadership Conference and is given to states with an increase in AMA membership.

## Nominations Being Accepted for Three Annual KMA Awards

Nominations are being accepted for three awards which are presented each year at the KMA Annual Meeting to outstanding physicians and lay people.

Nominees for the Educational Achievement Award are chosen from citizens of the Commonwealth of Kentucky who have made a significant contribution in medical or medically related education. Contributions in all areas of teaching, research, clinical application of medical practice and/or patient education are factors that will be considered. Recipients are chosen by the Continuing Medical Education Committee.

The Distinguished Service Award is presented each year to a physician in the state who has contributed to organized medicine or individual medical service, community health or civic betterment and medical research or distinguished voluntary military service. The nominee may qualify on any one or a combination of these points.

The Kentucky Medical Association Award is presented to an outstanding lay person in honor of his or her outstanding accomplishments in the field of public health and/or medical care. July 15 is the deadline for receiving nominations. Recipients of the Distinguished

Service Award and the Kentucky Medical Association Award will be chosen by the Awards Committee.

Nominee material should include background and historical information about the nominee as well as justification for the nomination.

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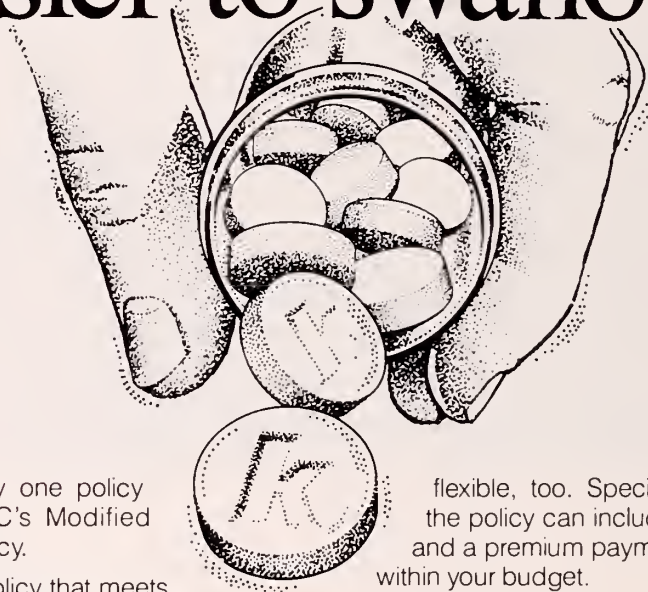
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# 17th ANNUAL

## Emergency Medical Care Seminar

Executive Inn Rivermont

Owensboro, KY June 25, 26, 27, 1987

Sponsored by **Kentucky Medical Association**



Thursday, June 25, 1987

Morning Session

### Theme: "Physiology & Pathophysiology of Shock"

- 8:00 a.m. Registration  
8:40 a.m. Welcome and Orientation  
Opening Remarks  
E. Truman Mays, M.D., Chairman  
KMA  
Emergency Medical Care  
Committee  
Moderator: Charles B. Spalding, M.D.
- 9:00 a.m. "Pathophysiology of Neurogenic Shock"  
William H. Brooks, M.D.,  
Lexington
- 9:40 a.m. "Pathophysiology of Hemorrhagic Shock"  
Richard J. Mullins, M.D.,  
Louisville
- 10:20 a.m. Coffee Break  
10:40 a.m. "Pathophysiology of Cardiogenic Shock"  
Albert B. Mercer, M.D.,  
Owensboro
- 11:20 a.m. "Emergency Indications for Hyperbaric Oxygenation"  
Richard Lock, M.D., Lexington
- 12:00 noon Luncheon  
Guest Luncheon Speaker  
"Malpractice Prevention in an Emergency Medical Setting"  
James Baumgarten, M.D.  
Louisville

Afternoon Session

TRACK I: PRE-HOSPITAL PERSONNEL  
Moderator: Tommy Thompson

- 2:00 p.m. "Chest Injuries"  
Joe Vetter, Flight Paramedic,  
Louisville
- 3:00 p.m. Coffee Break  
3:15 p.m. "Assessment of Head Injuries"  
Charlotte DeLise, R.N.
- 4:15 p.m. Adjournment

- 4:30 p.m. "Ambulance Competition  
(Everyone Welcome to Observe Competition)

Afternoon Session

TRACK II: MDs, RNs, LPNs

- 2:00 p.m. "Role of Mast Trousers in Shock"  
Yvonne Wight, R.N., M.S.N.,  
Owensboro
- 2:30 p.m. "Organ Procurement"  
Debby Stiles, R.N., Bowling Green
- 3:00 p.m. Coffee Break  
3:15 p.m. "Curiosity Kills: Children and Poison"  
Nancy Matyumas, Phar.D.,  
Louisville
- 4:15 p.m. Adjournment

Afternoon Session

TRACK III: MDs, RNs, LPNs  
Moderator: Barbara Cox, R.N.

- 2:00 p.m. "Myocardial Preservation with Streptokinase or Transluminal Angioplasty"  
David A. Dageforde, M.D.  
Louisville
- 3:00 p.m. Coffee Break  
3:15 p.m. "I.V. Nitroglycerin"  
Janet L. Smith, M.D., Louisville
- 3:45 p.m. "Aneurysm: Thoracic & Abdominal"  
A. Bert Sparrow, M.D., Louisville
- 4:15 p.m. Adjournment

TRACK IV: Doctors and Nurses

- 2:00 p.m. "Burn Update"  
Terry Stanley, R.N.
- 3:00 p.m. Break  
3:15 p.m. "Thoracic Trauma"  
Deve Vetter, R.N., LEN
- 4:15 p.m. Adjournment



FRIDAY, JUNE 26, 1986

Morning Session

**Theme: "Ventilation and Gas Exchange of the Lungs"**

- 8:00 a.m. Registration
- 8:50 a.m. Opening Remarks  
Moderator: Nelson B. Rue, M.D.
- 9:00 a.m. **"Arterial Blood Gas Interpretation"**  
Judah L. Skolnick, M.D., Louisville
- 9:40 a.m. **"Effects of Injury on Pulmonary Ventilation and Gas Exchange"**  
Robert N. Pope, M.D., Owensboro
- 10:20 a.m. Coffee Break
- 10:40 a.m. **"Obstruction of the Upper Airway Pediatrics"**  
Elizabeth H. Wade, M.D., Louisville
- 11:20 a.m. **"Differentiating Causes of Cyanosis"**  
Marcus L. Dillon, M.D., Lexington
- 12:00 noon Luncheon  
Guest Luncheon Speaker  
**"Sexually Transmitted Diseases"**  
Charles R. Oberst, M.D., Louisville

Afternoon Session

TRACK I: Pre-Hospital Personnel

- 2:00 p.m. **"Child Abuse"**  
Mike L. Williams, J.D., EMT, Florence
- 3:00 p.m. Coffee Break
- 3:15 p.m. **"The Disturbed and Unruly Patient"**  
Charlotte Delise, R.N.
- 3:45 p.m. **"Preserving the Crime Scene"**  
Bill Jenkins, KY State Police, Bowling Green
- 4:15 p.m. Adjournment

Afternoon Session

TRACK II: MDs, RNs, LPNs

- 2:00 p.m. **"Perioperative Monitoring"**  
Louis R.M. Del Guercio, M.D. Val Halla, NY
- 2:30 p.m. **"Lasers in the OR"**  
Maryanne Adams, R.N., Louisville
- 3:00 p.m. Coffee Break
- 3:15 p.m. **"OR Nurse — An Endangered Species"**  
Becky H. Adams, R.N., M.S.N., Louisville
- 3:45 p.m. **"Ambulatory Surgery"**  
Margaret S. Howard, R.N., Owensboro
- 4:15 p.m. Adjournment

Afternoon Session

TRACK III: MDs, RN, LPNs

- 2:00 p.m. **"Magnetic Resonance Imaging"**  
Janice McMahan, R.N., Louisville
- 2:30 p.m. **"Diagnostic Imaging"**  
Lynn Wolford, R.N., Louisville
- 3:00 p.m. Coffee Break
- 3:15 p.m. **"Pulmonary Embolism"**  
William M. O'Bryan, M.D. Owensboro
- 3:45 p.m. **"Envenomation: Insects & Snakes"**  
Royce E. Dawson, M.D. Owensboro
- 4:15 p.m. Adjournment

TRACK IV: Doctors and Nurses

- 2:00 p.m. **"Pediatric Emergencies"**  
Elizabeth H. Wade, M.D., Louisville
- 3:00 p.m. Break
- 3:15 p.m. **"Pediatric Emergencies"**  
Elizabeth H. Wade, M.D., Louisville
- 4:15 p.m. Adjournment

SATURDAY, JUNE 27, 1987

Morning Session

**Theme: "Prevention of Serious Injuries & Critical Illness"**

- 8:00 a.m. Registration
- 8:45 a.m. Opening Remarks  
Moderator: Barbara Cox, R.N.
- 9:00 a.m. **"Preventing AIDS and other Communicable Diseases"**  
Janet Sergeant, R.N., Louisville
- 9:30 a.m. **"Seat Belts & Child Restraints"**  
Mark E. Kessinger, Admin. Coordinator, Lexington
- 10:00 a.m. Coffee Break
- 10:15 a.m. **"Wellness for Health Personnel"**  
Will W. Ward, Jr., M.D., Louisville
- 10:45 a.m. **"Reducing Risk of Heart Attacks"**  
Ronald Barbee, M.D., Louisville
- 11:15 a.m. **"Laugh, Don't Cry: Stress Reducers"**  
George Bennett, M.S.W., Lexington
- 12:00 noon Luncheon  
Guest Luncheon Speaker  
**"Impaired Health Personnel"**  
David L. Stewart, M.D., Louisville

OPTIONAL PROGRAM

- 2:00 p.m. **"Legal Aspects of Emergency Medicine"**
- 3:40 p.m. Judy Schwank, Attny., R.N., Bowling Green

# Geriatric Aspects of Psychopharmacology

## (A TWO PART SERIES)

### PART A

STEVEN LIPPMANN, M.D.

*The increasingly large percentage of older people in our society necessitates specific attention to geriatric medicine and clinical psychopharmacology. As patients, the elderly often require treatment for anxiety, depression, psychosis and memory impairment. Prescribing medicines in geriatrics requires careful consideration to drug indication, dosage, side-effects and follow-up. Initially, always administer drugs in lower quantities and escalate doses more gradually with close observation of such parameters as sedation, efficacy and adverse consequences. Side-effects and dangers of polypharmacy are enhanced in this population; especially anticipate anticholinergic manifestations, cardiotoxicity, orthostatic hypotension and their inherent risks.*

---

four fold growth in the relative number of people 65 years or over, an 800% absolute increase.<sup>1</sup> Similar expansion is expected in the next 75 years. This trend stimulates interest in geriatric medicine and clinical pharmacology, particularly regarding the special considerations for safe and effective use of drugs. This two part series is an over-view of psychopharmacology for patients of advanced age.

Psychotropic drugs are commonly utilized in this population. Because of multiple diseases, older patients often receive several medications, creating polypharmacy and potential drug interactions. Statistically, elderly patients receive 18 prescriptions annually with two-thirds of people over age 65 averaging between five to 12 drugs daily on a regular basis. Medications induce a much higher side-effect prevalence in the elderly than in younger persons. Adverse drug reactions occur over five times as often and are less well-tolerated. Age-related physiologic changes account for the increased risk.

That older patients respond to medicines differently than younger

ones is well-established.<sup>2-5</sup> Physiologic alterations associated with aging make it important to understand the pharmacodynamic effects of drugs on the aging body, and to appreciate changed pharmacokinetic drug dispositions within the body. For example, there is an increase in the volume for distributing lipid soluble drugs and less volume for water soluble ones; a reduction in the plasma proteins decreases drug binding, and there is diminished drug elimination via attenuation in hepatic metabolism and renal clearance. Albumin levels may decline and increase the available unbound, active drug levels. This trend is exaggerated in patients taking multiple drugs, because of competition for binding sites. Drug receptors within the brain might become more sensitive with age and could explain the greater potency of many medications in older persons. Desired and undesired effects are observed at lower dosage. The greater frequency of confusional reactions with administration of centrally active anticholinergic agents is an example. Age-related baroreceptor reflex insensitivity occurs too, and can lead to falls on exposure to sym-

**E**ldery people comprise the fastest growing segment of our society. Over the first three-fourths of this century, there was a three to



patholytic substances. The net effect of these changes usually is for increased drug levels, greater risk for toxicity and a longer half-life, even at doses lower than prescribed for younger people. Drug interactions and side-effects also occur much more often. In geriatrics, therefore, initially administer only one-third to one-half the dose quantity that is otherwise prescribed.

This review (Part A) considers lithium and antidepressants; Part B in this series (see next month's JKMA) will focus on anxiolytics, neuroleptics and describes the pharmacotherapy of dementias. The discussion is limited to issues relevant only to prescribing in geriatric practice; therefore, seek other routine pharmaceutical information and precautions from selected sources.<sup>2-6</sup>

### Lithium

Lithium is prescribed primarily for the prevention of relapse in mood disturbances and is a drug of special interest as applied to older patients. It is excreted unmetabolized by the kidney; therefore, age and renal status are critical factors in lithium pharmacokinetics.<sup>3-6</sup> A progressive decline throughout life characterizes age-related **normal** changes in renal function which include an over one-third loss in glomerular filtration rate and a 50% reduction in renal blood flow. This accounts for diminished drug clearances. Because of these decreases even in healthy older subjects, lithium is usually administered in markedly reduced dosage. Half-lives in older patients **without** kidney disease may extend from a youth norm of 24 hours to a period of over twice that time. Remember, too, that decreased lean body mass results in less creatinine production; therefore, the serum creatinine may remain normal

despite significant loss of renal reserve.

Most elderly patients receive a lithium dose much lower than anticipated in youth. The typical younger patient uses between 900-1200 mg of lithium in two to four doses; the typical dose expectation in healthy geriatric subjects, without renal disease, is for 150-600 mg daily, with 300 mg the most common. Efficacy and blood levels are unaltered; only the dose is lower, based on the age differential. Also, the higher incidence of nephropathologies in aging people (as from hypertension, diabetes, *etc*) exaggerates this trend of diminished renal clearance, and further necessitates still lower dosage and closer monitoring.

The juxtaposition of hypertension and/or cardiac disease with lithium may be problematic due to a sodium/lithium interaction. Low salt diets and/or diuretics with naturetic qualities (*eg*, thiazides) are common in geriatric practice. Extra-cellular fluid sodium depletion for any reason results in greater lithium reabsorption at the proximal renal tubule. Thus, degrees of hyponatremia increase relative lithium sparing, which may cause toxicity, or at least greater lithium concentrations and half-lives

than might otherwise be expected. Similarly, sodium losses (*eg*, vomiting) induce a reduction in renal lithium clearance. Inadequate diet or dehydration may present a related pattern; therefore, good nutrition and normal hydration with lithium therapy must be assured. Lithium-altered sodium/potassium balance also may produce changes in the electrocardiographic T waves and very rarely causes an arrhythmia. All cases require treatment individualization, with dose adjustments based on clinical signs, not just blood tests. Apply the lowest effective dose. The therapeutic blood level range remains 0.5 to 1.2 mg Eq/l, with lower rather than higher assays recommended within these limits. The blood sample for a lithium level should be obtained 12 hours after the last dose. Otherwise, precautions and usage follow standard practice.

Recent literature reflects new trends in the employment of so-called "lithium alternatives," most notably carbamazepine, clonazepam and valproate.<sup>7</sup> These anti-convulsants have been discovered to be useful also in cases where lithium is not effective or is poorly tolerated. Indications are similar to those for

#### Guidelines For Safe Psychopharmacotherapy In Geriatrics

1. Perform an appropriate diagnostic work-up
2. Select specific treatments with *individualized* indications
3. Discontinue as many medicines as possible
4. Provide appropriate holistic therapy for other medical conditions
5. Ensure adequate hydration and nutrition
6. Prescribe so as to avoid drug interactions
7. Provide information and warnings about side-effects and their management; also how to contact the physician about problems
8. Always start with much *lower* dosages
9. Escalate dosage more slowly
10. Set easy-to-follow drug administration schedules
11. Anticipate side-effects and monitor closely
12. At prescription refill time, assure adequacy, need and efficacy of *each* medicine *before* continuing the therapy
13. Pay attention to the special risk factors of the elderly; *e.g.*, bladder obstruction, cardiac disease, risk for falls, *etc.*

lithium and geriatric applications follow the usual protocol admonitions for lower initial dosage and closer follow-up with gradual escalation in dosage.

### **MAOI**

Monoamine oxidase inhibitors (MAOI) are effective antidepressants, but not commonly prescribed. Hypotension is the most prominent MAOI side-effect, and one of particular concern to older people.<sup>8-10</sup> Conversely, MAOI's carry risks for inducing **hypertensive** crises if co-ingested with **indirect** action sympathomimetic amines. Utilization of MAOIs requires the absolute prohibition of indirect-action sympathomimetic drugs or foods containing tyramine.<sup>9-10</sup> Without such dual exposures, hypertensive crises are avoided.

MAOIs are recommended for treating depression, especially atypical depressions (characterized by hypersomnia and over-eating). Panic attacks, generalized anxiety and phobias are other indications. MAOIs are occasionally selected for older people based on low anticholinergic properties and relatively little adverse cardiac effect. Though cholinergic blockade is experienced at times, the magnitude is moderate. MAOIs are sometimes chosen to treat depression in "heart" patients because of a lesser tendency to produce cardiac conduction prolongations. Pre-existing conduction disease cases have thus been safely and effectively treated.<sup>11</sup> Complete pharmacologic and food avoidance lists are available through routine resources.<sup>9,10</sup> Prescribing MAOIs in geriatrics follows the routine for all drug administrations, but with some special precautions, *ie*, monitoring blood pressure, lower dose, closer follow-up, *etc*. Using phenelzine as

an illustration, instruct patients **initially** to take 15 mg p.o. once or twice daily, as opposed to three to four administrations in youth. Follow clinical progress and side-effects to guide adjustment in the dosage, with some geriatric patients requiring doses as high as those applied to younger subjects.

### **Antidepressants**

Depression is common among older people.<sup>2</sup> There are seven antidepressants which are tricyclic, and there is one drug each in the tetracyclic and triazoloiperidine groups. Indications for use are the same in all ages (*ie*, major depression and some chronic pain and anxiety disorders, but not for grief or as a "sleeping pill"); however, there are a few special precautions for geriatric applications which go **beyond** the routine of starting with lower doses and escalating more slowly than for younger patients.<sup>2-6,8,12-14</sup>

Antidepressants have significant anticholinergic, cardiotoxic, sedating and orthostatic side-effects, but they are nevertheless usually safe when carefully monitored. Each patient and their individualized risk factors should be considered. Typical initial doses with doxepin, for example, would be 25 mg one to three times daily, while latter dosages are titrated to individual requirements.

Avoiding atropine-like effects is often important in this population because of prostate enlargements, constipation, poor vision, *etc*. Amitriptyline, imipramine and trimipramine, for example, are potent anticholinergic agents, while desipramine and trazodone are low in this regard. Common, chronic open-angle glaucoma is not a major concern, but warning applies only to

those rare, acute narrow-angle forms. At times, cholinergic blockade is desirable as in irritable colon or peptic ulcer.

Cardiotoxicity is an important adverse consequence of antidepressants, but each class of drugs within this group has a different profile.<sup>2-6,13-15</sup> Concern is voiced both in routine and toxic exposures; however, trazodone is dramatically safer for the heart than tricyclic or tetracyclic antidepressants. Alprazolam, too, (a benzodiazepine with antidepressant qualities) has great cardiac safety. A pre-treatment cardiovascular history, physical examination and an electrocardiogram are expected for all depressed geriatric patients.

Tricyclic and tetracyclic antidepressants are known for prolonging cardiac conduction times.<sup>2-6,8,12-14</sup> This may result in blocks or in exacerbating pre-existent conduction defects, with Q-T prolongations the most common; but atrio-ventricular or bundle branch blocks also can appear. In predisposed patients, either avoid these medicines or use them carefully, with close follow-up (*eg*, serial electrocardiographic monitoring). Amitriptyline is probably the most potentially cardiotoxic choice in this group. Rhythm disturbances do occur rarely, but these drugs also have quinidine-like *antiarrhythmic* properties. Anticipate that an overdose toxicity with these drugs will produce an abnormal cardiac rhythm. Conjoint use with quinidine-like antiarrhythmic drugs potentiates quinidine-like characteristics. Tachycardia from anticholinergic antidepressants, and hypotension from adrenergic effects may be important in ischemic heart disease. A mild degree of negative inotropism can, on rare occasions, be a problem in borderline cardiac



decompensation. Despite these problems, the drugs are usually effective and well-tolerated in non-toxic exposures.

Trazodone is a fairly recent antidepressant and a compound with much less cardiotoxicity than the previous groups.<sup>2,13-15</sup> Trazodone is prone to producing orthostatic hypotension, and especially in predisposed individuals, it also may precipitate arrhythmias. This arrhythmia-inducing potential is different than observed in other antidepressants. Cardiotoxicity otherwise is minimal, and over-all trazodone is probably a safe, excellent, **sedating** antidepressant for the geriatric patient with heart disease. Nomifensine was the newest entry (1985) among antidepressant pharmaceutical products; however, this drug is now completely **withdrawn** from the market (January, 1986) because of hypersensitivity problems. Nomifensine was specially cited for its advantage of relatively great cardiac safety and non-sedating qualities, even in toxic dose exposures.

In appropriate doses, sedation is not often a problem and it is frequently desired with depression-related insomnias.<sup>2-5,12</sup> Warn patients about sedation and then select the drug according to patient parameters, *ie*, use a sedating drug for anxious depression (*eg*, amitriptyline, doxepin or trazodone) or in a fatigue-laden case provide a less sedating version (*eg*, desipramine or protriptyline). If antidepressants are combined with sedatives or alcohol, expect more sedation than in younger people.

Antidepressants have alpha adrenergic properties which may induce orthostatic hypotension.<sup>2-5,12,14</sup> These sympatholytic drugs induce risk for older patients, since baroreceptors are less sensitive. Check

for problems with an antidepressant from past exposures, or potential difficulties for a specific patient, *eg*, maprotiline lowers the seizure threshold. Remember that tricyclic and tetracyclic antidepressants are dangerous in overdoses. Lethality and complications of toxicity are remarkable, therefore prescribing antidepressants in large quantities is risky. Attend to overdoses as a medical emergency. Trazodone is less dangerous in an overdose,<sup>13</sup> and it has provided low morbidity and no reported overdose mortalities.

Another new antidepressant, bupropion, had been marketed in 1986. Because of potent epileptogenic properties, this aminoketone drug has been removed from the market despite being low in sedation, anticholinergia, cardiotoxicity and orthostasis.<sup>16,17</sup> Do not confuse this agent with the new anxiolytic drug buspirone.

**References** 1. Aging and Medical Education. National Academy of Sciences, Washington, D.C., 1978. 2. Lippmann S: Drug therapy for depression in the elderly. *Postgraduate Medicine* 73:159-173, 1983. 3. Crook T, Cohen G (eds): *Physicians' Handbook on Psychotherapeutic Drug Use in the Aged*. New Canaan, Mark Powley Associates, Inc., 1981. 4. Poe WD, Holloway DA: *Drugs and the Aged*. New York, McGraw Hill Inc., 1980. 5. Nandy K (ed): *Geriatric Psychopharmacology*. New York, Elsevier/North-Holland, 1979. 6. Burch EA: Psychopharmacological variables in the elderly, in *Clinical Perspectives on Aging*, Jenike MA (ed). Wyeth Laboratories, 1985. 7. Lerer B: Alternative therapies for bipolar disorder. *J Clin Psychiatry* 46:309-316, 1985. 8. Goodman WK, Charney DS: Therapeutic applications and mechanisms of action of monoamine oxidase inhibitor and heterocyclic antidepressant drugs. *J Clin Psychiatry* 46 (10, Sec. 2):6-22, 1985. 9. Jenike MA: The use of monoamine oxidase inhibitors in the treatment of elderly, depressed patients. *J Am Geriatrics Society* 32:571-575, 1984. 10. Zisook S: A clinical overview of monoamine oxidase inhibitors. *Psychosomatics* 26:240-251, 1985. 11.

Lippmann S, Manshadi M, Gultekin A: Monoamine oxidase inhibitors for depressed cardiac patients. *J Clin Psychiatry* 46:545-546, 1985. 12. Lippmann S: Standard and newly-available antidepressant drug treatments. *JKMA* 81:687-692, 1983. 13. Coccaro EF, Siever LJ: Second generation antidepressants: A comparative review. *J Clin Pharmacol* 25:241-260, 1985. 14. Salzman C: Clinical guidelines for the use of antidepressant drugs in geriatric patients. *J Clin Psychiatry* 46 (10, Sec. 2):38-44, 1985. 15. Lippmann S: Trazodone cardiac effects; in Ayd FJ (ed): *International Drug Therapy Newsletter* 20:29-321, 1985. 16. Mendels J, Amin M, Chouinard G, et al: A Comparative Study of Bupropion and Amitriptyline in Depressed Outpatients. *J Clin Psychiatry* 44:5 (Sec. 2) 118-120, 1983. 17. Wenger TL, Cohn JB, Bustrack J: Comparison of the Effects of Bupropion and Amitriptyline on Cardiac Conduction in Depressed Patient. *J Clin Psychiatry* 44:5 (Sec. 2) 174-175, 1983

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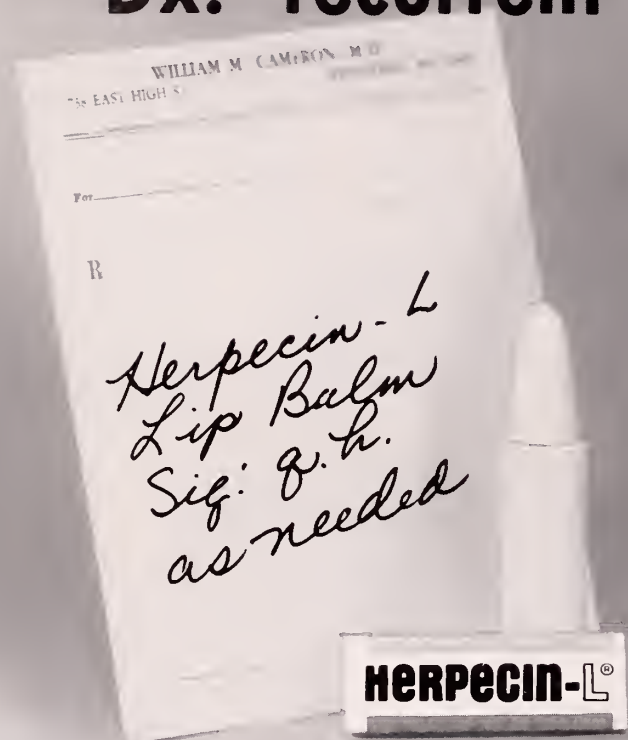
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Abstracts should contain no more than 150 words which should concisely state the purpose(s) of the study or investigation, basic procedures, main findings, and the principle conclusions, but should not contain references, footnotes, figures, or tables. Copy should be typed doublespaced and should include complete name and address where correspondence should be directed and the name and address of the individual who will present the paper.

In addition to paper and poster presentations, case reports (cases that are unusual or distinctive) will be scheduled for the Saturday morning session. Individuals presenting case reports should be prepared to include chest films and/or slides with presentation.

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## **Scientific Sessions**

The Ramada Inn East/Bluegrass Convention Center will host the 1987 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the morning of September 15, 16 and 17. The program scheduled for Wednesday will feature J. Kelley Avery, M.D., Director of CME at St. Thomas Hospital in Nashville. His presentation "Dealing with a Bad Result," will focus on risk management and will be followed with a roundtable discussion conducted by physicians from seven specialty groups who will discuss the impact of risk management on each specialty. A question and answer session will follow.

## **Specialty Group**

Programs for 22 specialty groups will be held during the afternoons of September 15, 16 and 17. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be

held in the Ramada Inn East and Convention Center. Physicians attending general sessions and specialty group meetings will qualify for Category I Credit.

## **KMA House of Delegates**

The opening meeting of the House of Delegates will be held Monday, Sept. 14, at 9 a.m. in the Julia Belle Room of the Convention Center. Reference Committee meetings will begin at 2 p.m. on Monday and the final meeting of the House will begin at 6 p.m. Wednesday, Sept. 16. Officers for the

1987-88 Associational year will be elected during the final House meeting.

## **Other Activities**

The Annual KEMPAC Seminar will be held Monday, Sept. 14, at the Bluegrass Convention Center. A reception begins at 6 p.m. with dinner at 7 p.m. Kentucky Gubernatorial candidates are scheduled as guest speakers.

The President's Luncheon will be held Sept. 16, with presentations of KMA awards and the installation of the 1987-88 KMA President Donald C. Barton, M.D.

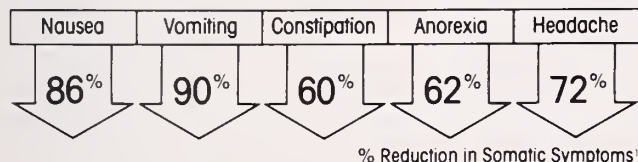


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**Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

**Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

**Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

**Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

**Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

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# Echoes and Blindspots

**T**raditionally, physicians have opposed obstacles to independent medical practice and rightfully so. On the other hand, medicine's major legislative battles focus upon nonphysicians' attempts to practice independently. Our "friendly legislators" view this as a somewhat self-serving position and/or inconsistent (quality of care notwithstanding). Similarly, we object to certain nonphysician providers, yet hire them and utilize their services. On the local level, we grouse at alternate delivery systems, but "in the name of protecting our practice" we participate in the same schemes. We complain about "for profit" medical enterprises and then purchase stock in these same "evil corporations." Perhaps all of us have been positioned in one or more of the above scenarios in recent years. Can some of our actions be legitimately questioned?

Health care now accounts for 10.7% of the GNP. Government and business are overwhelmed with the cost of health insurance and looking for a way out. (Never mind a chunk of the blame is theirs to begin with.) Fiscally, they no longer support the concept that only physicians, hospitals, and nursing homes should render medical care. They stand ready to experiment and loosen legislated restraints against nontraditional providers, believing it will lower costs. In essence, they're ready to try anything to reduce health premiums.

The public, like physicians, are not happy with government interference. Many of them resent the fact that health insurers will not reimburse them for

health services rendered by nonphysicians. They write letters to better business bureaus, office of attorneys general offices, medical societies and licensure boards, complaining about fees and inconsiderate treatment. They complain long and loud when they get bills from physicians they don't know, have never seen, and didn't ask for.

The leadership of the 1986 Kentucky General Assembly cited physician income and told KMA leadership that "malpractice insurance is simply the cost of doing business." On one occasion, a legislative committee limited testimony of KMA with the condition that testifying physicians bring tax returns and car registrations! All of this should prompt us to be cautious in our "poor mouthing" — it seldom falls on sympathetic ears.

Many Kentuckians, in fact an estimated 10–15%, have no health insurance. A large portion of our population live from paycheck to paycheck, just purchasing essentials. Kentucky's major industries and crops are in severe decline and it will take time to correct these downturns. In the face of 12% unemployment and hard times, it is difficult for some to worry about "doctor problems" when their primary concern is meeting the very basic essentials of life for themselves and their families. Whether we like it or not, physicians are perceived as being "wealthy" with amenities that a large percentage of our patients have little, if any, hope of ever possessing. Polls show we are supported as individual physicians, but we



experience great difficulty transferring that loyalty to the profession, as a whole, which would enable us to be more effective in Frankfort and Washington.

Mandatory assignment, the SCOURGE OF MEDICINE is on its way. Massachusetts has adopted it and 14 states have introduced similar legislation. Vermont just banned "balance billing" for Medicare and Connecticut Medical Association has temporarily delayed implementation by agreeing to get 85% of physicians to accept assignment for persons at or below certain income levels.

At the national level, the AMA battles a rising tide of legislation from an Administration bent on turning the medical establishment upside down. Consumer groups, AARP, Welfare groups, and others press for legislation to reduce fees, mandate assignment and increase accountability. Radiologists, anesthesiologists, and pathologists (RAPs) are only the first wave of specialists to fall victim to consumer groups and a hostile Administration.

Despite these disincentives medicine is still the best profession in the world. But, it needs your help and understanding as it strives to meet public demands that conflict with traditional medical views in a changing political environment. KMA leadership and the majority of our membership have been very progressive and innovative in representing Kentucky physicians. They recognized the problem of indigent care and the plight of the "working poor" several years

ago. Kentucky Physicians Care (KPC) was created, and consequently thousands of Kentuckians have been treated in a caring mode. While over 2,200 physicians participate in the program, this is not a permanent solution. However, the Legislature has recognized KMA's sincerity and is paying close attention for the first time to what we have to say about indigent care. When the AIDS controversy arose, the legislative committee asked KMA for recommendations. We even created an ad hoc committee, at their request, to study the problem and bring back recommendations. The liability task force created by the Kentucky General Assembly specified physicians' crisis and the plight of physicians who do deliveries. Several years ago KMA formed a committee to work with the elderly and the AARP to listen to their concerns and resolve differences.

In the interest of quality care and concern for and protection of the public, the KMA House of Delegates, the Board of Trustees and specialty groups occasionally take stands which are unpopular with some of our members. KMA has supported with great enthusiasm the Board of Medical Licensure's call for stringent provisions to stop unauthorized and poor quality medical practice. Our county societies have also provided excellent leadership often at the price of losing members due to unpopular positions.

We still need greater participation. Recently a newspaper article pointed out

that "architects, engineers, lawyers, and their relatives" had given between 12-19% of political contributions to the major gubernatorial candidates. According to a recent study, the average physician gives \$35.00 per year to political candidates!

When we look at our internal concerns and balance them with the profession's unbelievable naivete toward politicians and governing bodies, it puzzles me that we have been able to survive this long! The federation of medicine has done well and accomplished great things despite the general apathy of physicians. While more and more physicians are becoming more active politically and more knowledgeable on issues, we still have a long way to go. Can we improve physician interest and participation? **I believe we can.**

In adversity we find strength; in problems we create opportunity. "It's not too late to build a better world." But, in the end, the county medical society, KMA or AMA, by themselves, cannot wrench us from the dilemma in which we find ourselves. This can only be done by you and me. . .one on one. . .communicating with patients, serving our communities, supporting and contributing to the candidates of our choice so they will have a real interest in us, and patient care — our real reason for existence.

**Fred C. Rainey, M.D.**  
**AMA Delegate**

# Gamma Globulin in the Treatment of Chronic Childhood Immune Thrombocytopenic Purpura

CHANDRAKANT C. PATEL, M.D., FAAP, SALVATORE J. BERTOLONE, M.D., FAAP  
and JAMES DONALD THALER, JR., B.S.

---

*Approximately 10-15% of children with immune thrombocytopenic purpura (ITP) fail to achieve a lasting remission and remain thrombocytopenic. Several therapies are currently used in treating chronic ITP with significant side effects. Use of intravenous high dose gamma globulin infusion has generally shown fewer side effects. Five children, ages two to eight years, who were diagnosed as having chronic ITP, were treated with 400 mg/kg of intravenous gamma globulin (IVgG) for five days. Four children had transient responses, one showed no response and one child had spontaneous remission six and one-half months after IVgG. No significant adverse side effects were observed. While response is good in only some patients, IVgG did not cure any patients with chronic ITP. IVgG may be ideal for emergency management of trauma, surgery or life threatening hemorrhage.*

---

**I**mmune thrombocytopenic purpura (ITP) refers to a decrease in the number of circulating platelets with subsequent increase in bruising and bleeding. Clinical diagnosis is made by excluding other diseases associated with decreased platelets in circulation such as disseminated intravascular coagulopathy (DIC), decreased platelet production, etc. Acute ITP occurs primarily in children, lasts less than six months and has a high rate of complete recovery. Approximately 10-15% of children with ITP fail to achieve a lasting remission and remain thrombocytopenic. Chronic ITP is seen more frequently in adolescents and adults and may be de-

finied as thrombocytopenia with platelet counts less than 100,000/ml and which persist beyond six to 12 months after the initial diagnosis.<sup>1,2,3,4</sup>

ITP is due to autoimmune mechanisms in 70-80% of the cases, in which platelets covered with anti-platelet antibodies, are sequestered in the spleen and liver. Management of ITP is aimed at returning platelet counts to normal. Splenectomy became the empirical treatment for chronic ITP in 1917 when Kaznelson observed a platelet count return to normal in a splenectomized ITP patient.<sup>5</sup> However, postsplenectomy sepsis with its necessary prophylactic penicillin led to the development of other treatment forms, such as intermittent corticosteroids, azathioprine, cyclophosphamide or vincristine administration, plasma pheresis and intravenous gamma globulin (IVgG).

Many recent studies have reported the use of high dose gamma globulin therapy in increasing platelet counts in ITP patients. We treated five children who had chronic ITP with IV gamma globulin and report here their response to such therapy.

## Materials and Methods

Platelet counts were done using a Coulter counter (S-Plus, Coulter Electronics). Those patients with very low platelet counts (less than 20,000) were rechecked manually. Platelet associated IgG (PAIgG) and IgM levels were measured by microtiter solid-phase competitive radioimmune assay (Blood Center of Southeast Wisconsin).

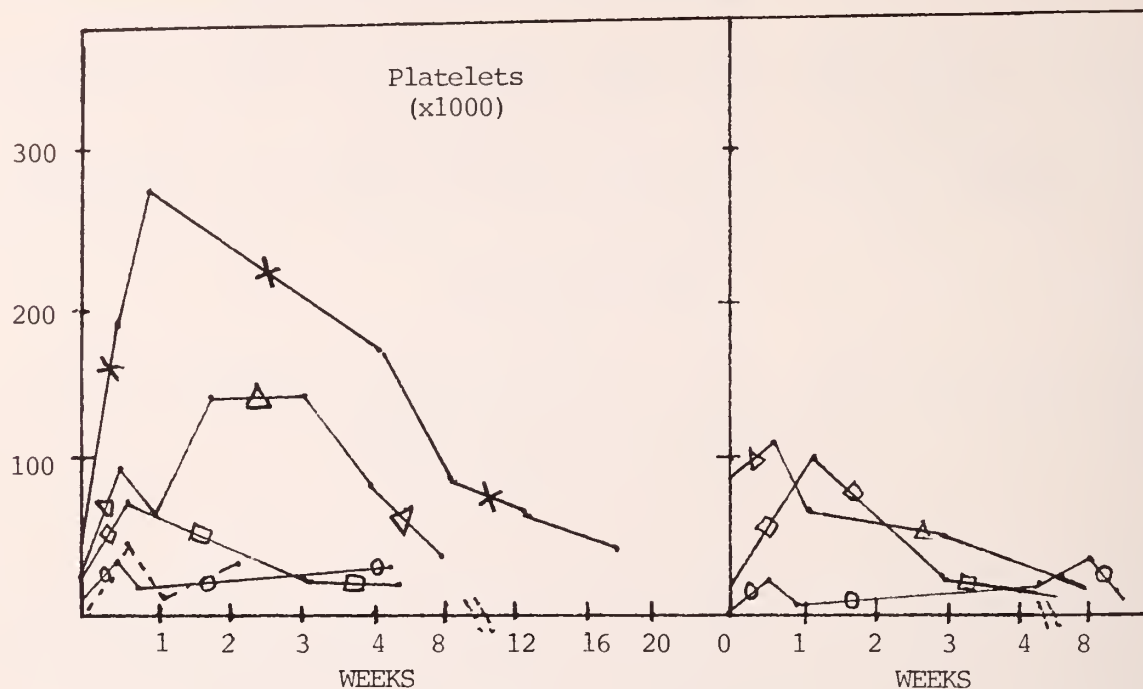
The treatment regimen involved infusion of IVgG over two to four hours at 400 mg/kg/day for five days (see graph). All patients received Cutter Biological's intra-

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Chandrakant C. Patel, M.D., Associate Professor and  
Salvatore J. Bertolone, M.D., Associate Professor.

---





Graph I(a): Platelet counts in five patients after their first infusion of high dose intravenous gamma globulin (IVgG). [Gamimmune] (b): Platelet counts in patients 1, 2 and 3 after the second infusion of IVgG. [Gamimmune]

Pt 1 —○—  
 Pt 2 —□—  
 Pt 3 —△—  
 Pt 4 —x—  
 Pt 5 ———

venous gamma globulin preparation (Gamimmune) except patient #1 received his third dose of Sandoz Pharmaceutical's gamma globulin (Sandoglobulin). Patients #1 and #2 were six weeks past their first IVgG infusion when they received their second infusion. Patient #3 received her second infusion 12 weeks after the first infusion. Patient #1 received his third infusion 21 weeks after his second infusion.

### Results

Four of the five children showed transient responses to IVgG infusion (graph Ia). After the first infusion of IVgG, three children (#2, #3, and #4) reached peak platelet count within one week and returned to near pretreatment levels within six weeks (table I). Patient #2 had a transient response after his second IVgG infusion. (Graph Ib) Patient #1 did not show any response to IVgG. Two children (#1 and #2) had been splenectomized prior to IVgG therapy and one (#2) had a transient response to gamma globulin infusions.

PAIgG levels were elevated in three patients (#1, #2, #3) following IVgG infusion. No other side effects were noticed in the children after IVgG treatment.

### Discussion

The results of this study of five children with chronic ITP indicate that a single dose of IVgG does not always give a prolonged relief to the thrombocytopenic state. Of the five children studied, three patients showed a transient response to IVgG and one (patient #4) displayed a good response. The platelet count of patient #4 spontaneously increased to 200,000/ML six and one-half months after IVgG infusion. This rise to normal may indicate that her acute ITP may have gone into remission spontaneously.

Although children with acute ITP achieved remission sooner after IVgG treatment as opposed to steroids, the use of IVgG has best been studied in chronic ITP. Children with chronic ITP appear to respond better than adults. In two series<sup>6,7</sup> most children demonstrated an increase in the platelet count greater than 200,000/ml and were able to discontinue immunosuppressive medications. Two of the children in this study (#1 and #2) had been splenectomized prior to IVgG treatment, and only one had a transient response to IVgG. It appears possible that infusion of IVgG may postpone or avoid

TABLE 1  
PATIENT RESPONSE TO INTRAVENOUS GAMMA GLOBULIN (IVgG) THERAPY

Patient	Sex	Age at Diagnosis	Platelets at Diagnosis ( $\times 10^3$ )	Previous Therapy	Splen- ectomy	Age at IVgG	Platelets ( $10 \times 3$ )		
							Pre- <sup>1</sup> IVgG	Post- <sup>2</sup> IVgG	Post-IVgG (6-8 wks)
1	M	4 yo	7.000	P PP C V H	5 yo	13 yo	#1-20 #2-4 #3-16	30 5 7	4 52 22 (@ 15 wks)
2	M	8 yo	17.000	P PP V H	9 yo	13 yo	#1-14 #2-17	85 103	17 11
3	F	4 yo	54.000	P V H	none	5 yo	#1-1 #2-83	150 66	44 32
4	F	3 yo	12.500	P	none	4 yo	55	275	92
5	M	2 yo	27.000	P V PP	none	3 yo	2	40	21 (@ 2 wks)

<sup>1</sup>Each IVgG infusion was independent of previous or subsequent infusion (i.e., no booster IVgG was given)

<sup>2</sup>Platelet count post-IVgG was measured within 1 week after infusion

P = Prednisone

C = Cytoxan

PP = Plasma Pheresis

V = Vincristine

H = High Dose Prednisone

splenectomy in some children with chronic ITP. Bussell and Hilgartner in their series of children with chronic ITP treated after unsuccessful splenectomy responded well to IVgG; and state that previous treatment with IVgG does not impair response to splenectomy in refractory patients.<sup>8</sup>

Several mechanisms have been proposed to account for the effect of immunoglobulin infusion on platelet survival in ITP. Fehr *et al* postulated that interference with the Fc-receptor binding of immune particles to the macrophages of the reticuloendothelial system may be responsible, although this mechanism would not explain the long-term benefits of intravenous immunoglobulin that have been observed in some patients. An alternative hypothesis suggests that intravenous immunoglobulin induces a decrease in platelet autoantibody synthesis,<sup>9</sup> but it has not been proved that this represents specific inhibition of antibody synthesis.<sup>8</sup>

As the debate over the effectiveness of IVgG continues, some undesirable side effects have also been found. Schmidt, in 1982, treated a three-year-old child, with chronic ITP, by giving IVgG (Sandoglobulin) and found no response of the thrombocytopenia.<sup>10</sup> It has been re-

ported that platelet adhesiveness is temporarily reduced with high-dose IVgG therapy when there is increased plasma IVgG.<sup>9</sup> Clinical symptoms of irritability, transient tachycardia, fever, chills, headaches, and emesis have also been reported.<sup>11,12</sup> While late toxicity, such as hepatitis or immune deficiency syndrome, has not been reported with the current immunoglobulin preparations used, the potential risk of such toxicity must be weighed against the risk of refractory thrombocytopenia. Such hazards may be acceptable in an emergency management of trauma, surgery or life threatening hemorrhage.<sup>13</sup>

The use of IVgG has been demonstrated in repeated studies showing a marked increase in platelet counts in patients with chronic ITP.<sup>14,15,6,16,7,9,18,19</sup> Four of the children in this study also showed a transient response to IVgG. However, this increase in platelet count remains at best for a few weeks in the majority of cases, before falling to near pretreatment levels. Although one cannot predict who will respond to intravenous gamma globulin, this agent does provide another potential means of treatment for children who have proven refractory to medical management and splenectomy and who are at



## IMMUNE THROMBOCYTOPENIC PURPURA—Patel et al

risk of life threatening hemorrhage. IVgG therapy has fewer undesirable side effects than other therapeutic modalities. This study does show failure of gamma globulin to cure any patient with chronic ITP. Due to the high cost of IVgG<sup>11</sup> and in a time of cost awareness in health care its use in cases requiring frequent infusions to attain a "response" should be reviewed.

**References** 1. Karpatkin M, Karpatkin S: Immune Thrombocytopenia in Childhood. *Am J Pediatr Hematol Oncol*; 3:213–219, 1981. 2. McMillan R: Chronic Idiopathic Thrombocytopenic Purpura. *N Engl J Med*; 304:1135–1147, 1981. 3. McClure PD: ITP in Children: Diagnosis and Management. *Pediatrics*; 55:68–74, 1975. 4. Karpatkin S: Autoimmune Thrombocytopenic Purpura. *Blood*; 56:329–343, 1980. 5. Schulman I: Idiopathic (Immune) Thrombocytopenic Purpura in Children: Pathogenesis and Treatment. *Pediatr in Review*; 5:173–178, 1983. 6. Imbach P, Barandum S, d'Appuzzo V, et al: Intravenous Gamma Globulin for ITP in Childhood. *Lancet*; 1:1228–1231, 1981. 7. Bussell JB, Schulman I, Hilgartner MW, et al: Intravenous Use of Gamma Globulin in the Treatment of Chronic ITP as a Means to Defer Splenectomy. *J Pediatr*; 103:651–654, 1983. 8. Bussell JB, Hilgartner MW: The Use and Mechanism of Action of Intravenous Immunoglobulin in the Treatment of Immune Hematologic Disease. *Br J Hematol*; 56:1–7, 1984. 9. Bussell JB, Kimberly RP, Inman RD, et al: Intravenous Gamma Globulin Treatment of Chronic ITP. *Blood*; 62:480–486, 1983. 10. Schidt B, Forster J: Increased Platelet-Associate IgG in Child on High-dose Gamma Globulin for ITP. *Lancet*; 11:39–40, 1982. 11. Ljung R, Nilsson IM: High-dose IVgG: A Cautionary

Note. *Lancet*; 1:467, 1985. 12. Warrier I, Lusher JM: Intravenous Gamma Globulin Treatment for Chronic ITP in Children. *Am J Med*; 76(3):193–198, 1984. 13. Bussell JB, Goldman A, Imbach P, et al: Treatment of Acute ITP of Childhood with Intravenous Infusions of Gamma Globulin. *J Pediatr*; 106:886–890, 1985. 14. Russell EC, Maurer HM: Alternatives to Splenectomy in the Management of Chronic ITP in Childhood. *Am J Pediatr Hematol Oncol*; 6:175–199, 1984. 15. Fehr J, Hofman V, Kappeler U: Transient Reversal of Thrombocytopenia in ITP by High-dose IV Gamma Globulin. *N Engl J Med*; 306:1254–1258, 1982. 16. Mori PG, Mancuso G, Principe DD, et al: Chronic Idiopathic Thrombocytopenia Treated with Immunoglobulin. *Arch Dis Child*; 58:851–855, 1983. 17. Schmidt KG, Rasmussen JW, Diederichsen H, et al: Release of Platelets into the Circulation Induced by Gamma Globulin Treatment in a Case of ITP. *Blut*; 48:27–31, 1984. 18. Uchino H: A Cooperative Clinical Trial of High-dose Immunoglobulin Therapy in 77 Cases of ITP. *Thromb Haemostat*; 51:182–185, 1983. 19. Wordell CJ, Stubits EA, Tietze KJ, et al: Immunoglobulin in the Treatment of Autoimmune Thrombocytopenic Purpura. *Clin Pharmacol*; 4:206–213, 1985.

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# Radiation Therapy With and Without Chemotherapy in the Treatment of Localized Unresectable Pancreatic Carcinoma

## A Retrospective Analysis

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*Although the incidence of pancreatic cancer has continued to increase over the past 30 years, the five-year disease free survival remains stationary at 3%. The purpose of this manuscript is to present our results using radiation therapy with and without chemotherapy. The charts of patients with localized but unresectable carcinoma of the pancreas treated from 1980 through 1985 were reviewed. Three different treatment approaches were used: 1) continuous radiotherapy, 2) single split course therapy delivering 4000 rads in six weeks and 3) double split course therapy delivering 5000-6000 rads tumor dose in 9-10 weeks. Nineteen of the 27 patients received 5-fluorouracil (5 FU). The average survival of all patients was 9.9 months. Ten of 25 patients (40%) survived one year but one patient survived more than two years. The average survival of patients treated by continuous, single split course, and double split course was 5, 12.8, and 10.1 months respectively. The average survival of patients receiving chemotherapy in conjunction with radiotherapy was 11.4 months as compared to 6.3 months for those treated by radiotherapy alone. Although combined treatment improved the survival, the overall prognosis remains dismal for nonresectable carcinoma of the pancreas.*

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In the past 30 years, the incidence of pancreatic carcinoma has been on the increase.<sup>1</sup> The alarming aspect is that although the incidence is only 3% of newly diagnosed cancer, it is the fourth leading cause of death in males and the fifth in females. In 1960 the five-year survival was 1%; in 1982 it was 3%. In 1986, 375 of the estimated 15,300 new cancers in Kentucky will be pancreatic in origin and will account for 375 of the 7,800 cancer deaths.<sup>2</sup> Little, if any, improvement has been made in the treatment of pancreatic carcinoma during the past 20 years.

Surgical resection is the treatment of choice, but generally only 10-15% of the patients fall into this category (tumor confined to the pancreas and no invasion into the neighboring structures). Even with complete resection, the one, three and five-year survival rates are 22%, 3% and 1%, respectively.<sup>3</sup> Therefore, most patients are treated with bypass or palliative surgery, radiation therapy, chemotherapy, or a combination of the three modalities.<sup>4</sup>



TABLE 1

Randomized		Patient #	Results
Mayo <sup>4</sup> /1969	Yes	187	Addition of 5 FU & XRT improves survival
GITSG <sup>5</sup> /1981	Yes	194	Median survival: Xrt - 5.5 mo, Xrt + 5 FU - 10 mo (no difference 4000 vs 6000 rads)
MGH <sup>6</sup> /1982	No	12	External Beam & IORT EB Median Survival 15+ months
Thomas Jefferson <sup>7</sup> 1984	No	88	Combination of <sup>125</sup> I, External beam XRT, & Chemotherapy improves Survival (30% at 18 mo)
NCCTG <sup>8</sup> /1985	Yes	144	No Benefit Addition of Adriamycin & Mitomycin C and 5 FU
GITSG <sup>9</sup> /1985	Yes	157	Addition of Adriamycin to 5 FU & XRT was toxic and with no benefit
Toronto <sup>10</sup> /1986	No	77	Hyperthermia, Chemotherapy, & Immune Stimulation show increased survival (31% at 18 mos)

### Literature Review

Since the majority of cases are unresectable and the results continue to be dismal, a review of the literature revealed several recent trials.<sup>4-10</sup> (Table 1) To-date, 5 fluorouracil (5 FU) is clearly the single most effective chemo-therapeutic agent with a response rate of 68%.<sup>11</sup> The excellent tolerance and low morbidity of its use is well documented.

As reported in 1985 by the Gastrointestinal Tumor Study Group, (GITSG)<sup>9</sup> a prospective randomized trial comparing 5 FU with and without Adriamycin (doxorubicin) and radiation therapy showed no benefit with the addition of Adriamycin. The radiation therapy for the 5 FU arm was delivered by a two field technique (AP/PA) with megavoltage equipment. The dose rate was 200 cGy per fraction with each 200 cGy separated by a planned two week rest, for a total of 6000 cGy delivered in 30 fractions over 10 weeks. Seventy-three patients received 5 FU at a dose of 500 mg/m<sup>2</sup> by rapid intravenous infusion on days one, two, and three of each 2000 cGy course of radiation therapy. After completion of the radiotherapy, the patients received maintenance weekly 5 FU of 500 mg/m<sup>2</sup>. Seventy patients

were randomized to the arm receiving 5 FU and Adriamycin. The 5 FU schedule was the same as in the other arm. The Adriamycin was also delivered by rapid infusion at a dose of 15 mg/m<sup>2</sup> on day one, then decreased to a dose of 10 mg/m<sup>2</sup> to be administered each Monday. The radiotherapy for the 5 FU and Adriamycin arm was delivered with megavoltage equipment, using a three field technique (anterior-posterior, and wedged laterals). The daily dose was 200 cGy and after each 2000 cGy, a planned rest occurred of 2 weeks. The final tumor dose in all patients was 6000 cGy. Maintenance therapy for arm two was Adriamycin 60 mg/m<sup>2</sup> every three weeks, along with 5 FU 500 mg/m<sup>2</sup> weekly. At the time of the report only five patients were alive, two of 73 in the 5 FU arm and three of 70 in the 5 FU with Adriamycin arm. The median survival was 37 weeks for the 5 FU arm and 33 weeks for the 5 FU with Adriamycin arm. Statistically there was no difference in survival. Severe toxicity differed between the two arms, only 36% (26/73) in the 5 FU arm versus 53% (37/70) in the 5 FU plus Adriamycin arm ( $p < 0.05$ ).

The North Central Cancer Treatment Group reported prospective randomized trial on 144 patients with pancreatic cancer.<sup>8</sup> The first arm consisted of 45 patients treated with 5 FU 500 mg/m<sup>2</sup> administered by rapid intravenous infusion for five days. Courses were repeated at four and eight weeks, then every five weeks. The second arm had 44 patients who received 400 mg/m<sup>2</sup> 5 FU given four consecutive days with the addition of Adriamycin at 40 mg/m<sup>2</sup> on day one. The courses were repeated as above. The third arm had 55 patients who received 5 FU 600 mg/m<sup>2</sup> on days one, eight, 29 and 36. Adriamycin at 30 mg/m<sup>2</sup> on days one and 29, with the addition of mitomycin C 10 mg/m<sup>2</sup> on day one only. The course of chemotherapy was repeated every eight weeks. There were no statistically significant benefits between the three arms regarding median survival. In fact, this study demonstrated unrewarded toxicity and excessive costs. However, such prospective studies have recognized statistically significant prognostic variables, consisting of performance status and stage of disease at the time of treatment. In the patients who were fully productive and fully ambulatory, there was a significantly longer survival rate of 26 weeks compared to 11 weeks for those who were bedridden ( $p = .0086$ ). All responders, regardless of the therapy, had improved survival.<sup>8</sup>

Intra-arterial chemotherapy has been used in patients with inoperable pancreatic carcinoma.<sup>12</sup> In 63 patients treated, 47 received 5 FU (15 mg/kg/day) for

TABLE II-A					
CONTINUOUS RADIATION THERAPY					
Patient #	Age-Race/ Sex	Date Started	Dose**	Chemo +	Status
1	66 W/M	2/1/80	4000 cGy/25 fx	No	DOD 2 Mo
2	33 W/M	4/14/82	6000 cGy/40 fx	Yes + +	DOD 20 Mo
3	71 W/M	10/18/83	2000 cGy/10 fx	Yes	DOD 2 Mo
4	54 W/M	10/27/83	*1600 cGy/8 fx	No	DOD 2 Mo
5	56 W/M	6/4/85	*2000 cGy/10 fx	No	DOD 2 Mo
6	53 W/M	7/23/85	1750 cGy/17 fx	No	DOD 1 Mo
7	61 W/F	11/7/85	6040 cGy/32 fx	No	LWD 6 Mo

DOD - Dead of Disease

LWD - Living With Disease

TABLE II-B					
SINGLE SPLIT COURSE RADIOTHERAPY					
Patient #	Age-Race/ Sex	Date Started	Dose**	Chemo +	Status
8	58 W/M	7/16/84	4000 cGy/20 fx	Yes	DOD 5 Mo
9	75 W/F	10/18/84	4000 cGy/20 fx	Yes	LWD 18 Mo
10	72 W/M	3/7/81	4000 cGy/20 fx	Yes	DOD 8 Mo
11	73 W/M	1/30/84	4400 cGy/20 fx	Yes	DOD 21 Mo
12	43 W/F	8/13/84	4400 cGy/20 fx	Yes	DOD 7 Mo
13	42 W/F	6/10/82	4400 cGy/20 fx	Yes	DOD 10 Mo
14	75 W/F	5/17/83	4400 cGy/20 fx	Yes	LWD 36 Mo
15	63 W/M	1/4/82	4500 cGy/20 fx	Yes	DOD 6 Mo
16	54 W/F	4/27/81	5000 cGy/20 fx	Yes	DOD 16 Mo
17	40 W/M	1/23/85	4000 cGy/20 fx	Yes	DOD 6 Mo
18	65 W/M	11/10/82	4200 cGy/23 fx	Yes	DOD 8 Mo

TABLE II-C					
DOUBLE SPLIT COURSE RADIOTHERAPY					
Patient #	Age-Race/ Sex	Date Started	Dose**	Chemo +	Status
19	52 W/M	8/17/84	5000 cGy/25 fx	Yes	LWD 18 Mo
20	72 W/F	10/15/84	5000 cGy/25 fx	Yes	DOD 12 Mo
21	58 B/F	5/28/82	6000 cGy/33 fx	No	DOD 15 Mo
22	59 W/F	11/30/82	6000 cGy/30 fx	No	DOD 14 Mo
23	73 W/F	2/7/80	6000 cGy/30 fx	No	DOD 8 Mo
24	59 W/F	2/10/83	6600 cGy/30 fx	Yes	DOD 4 Mo
25	45 W/M	5/29/85	5000 cGy/25 fx	Yes	LWD 12 Mo
26	61 W/M	4/1/85	5000 cGy/25 fx	Yes	LWD 7 Mo
27	60 W/M	9/9/85	6000 cGy/30 fx	Yes	DOD 1 Mo

\*Patients planned to receive 6000 cGy; however, elected to discontinue therapy.

\*\*All therapy was delivered on the Therac 20 with 18 MV photons using a four field box technique. Tumor doses are at the isocenter.

\*Chemotherapy was with 5-FU 500 mg/m<sup>2</sup> administered on day one, two, and three of radiotherapy.

\*\*Patients treated with weekly 5FU 500 mg/m<sup>2</sup>.



five days, while the remaining 16 patients received multiple drugs. All patients received weekly IV 5 FU after completion of the intra-arterial chemotherapy. The median survival was five months with a mean survival of eight months. Twenty one percent (13 patients) survived greater than one year. Further studies using combined intra-arterial chemotherapy and radiotherapy are needed to properly evaluate this approach.

Intra-operative radiotherapy is currently under investigation at many institutions. The Massachusetts General Hospital<sup>6</sup> utilizes the combination of intra-operative and external beam radiotherapy with an average tumor dose of 6000 cGy for an estimated radiobiological equivalent dose of 8700 cGy. The median survival of the 12 patients treated was 15+ months with four patients alive without evidence of disease at four, eight, 15 and 26 months. In 1934, Handley reported the treatment of pancreatic carcinoma by interstitial radium.<sup>13</sup> Currently, the use of <sup>125</sup>Iodine or after-loading <sup>192</sup>Iridium implants, in conjunction with intra-operative and external beam radiotherapy with and without chemotherapy, is being investigated.<sup>6,7</sup> Shipley<sup>14</sup> reported that using <sup>125</sup>I seeds and external beam for unresectable disease gave a median survival of 11 months. These innovative modes of therapy are increasing the median survival as compared with the Gastrointestinal Tumor Study Group, however, the increase is not statistically significant.

Surgery is still the treatment of choice. However, the use of the highly morbid Whipple procedure shows no benefit over the use of total pancreatectomy (mortality rate, 21% versus 12.5% respectively). In the future, combinations of partial surgical resection, intra-operative radiotherapy, and/or the use of interstitial radiotherapy in combination with external beam radiotherapy and chemotherapy may offer the most promise to patients with unresectable carcinoma of the pancreas.

### Case Material

From 1980 through 1985, 27 patients with histologically proven localized but unresectable non-metastatic carcinoma of the pancreas were treated at the University of Louisville, Department of Radiation Oncology. The criteria for unresectability were invasion of the portal or mesenteric vein and/or metastases to second-level lymph nodes. Of the 27 patients, 17 were male and 10 were female. The average age was 59 years with a range between 33-75 years and the majority (55%) were  $\leq$  60 years.

All 27 patients had treatment planning CT scan using the G.E. 8800 with doses prescribed to the isocenter. The treatments were delivered on the Therac 20 using 18 MV photons. The four field isocentric technique utilized anterior, posterior, and lateral fields. Two fields were treated each day. In addition to the initial simulation and verification films, weekly port films were obtained to verify the position.

Three radiotherapy schedules were utilized. The first was a continuous course with a weekly dose of 900-1000 cGy in five fractions for a total tumor dose of 6000 cGy. The second plan utilized a single split course of radiation therapy. The patient was treated for two weeks to a tumor dose of 2000 cGy in 10 fractions allowed by a two week planned rest, and then returned for an additional 2000 cGy in two weeks. The final tumor dose was 4000 cGy. The third treatment plan also utilized a split course. The patient received 2000 cGy in 10 fractions over two weeks, followed by a two week planned rest. The patient returned for a second two weeks of therapy for an additional 2000 cGy, again followed by a two week planned rest and then returning for a final one to two week course for 1000-2600 cGy. The total tumor dose was 5000-6600 cGy in nine to 10 weeks with two rest periods of two weeks each.

Chemotherapy was delivered to 19 of the 27 patients. All patients except one (patient #2), were treated with a rapid infusion of 5 FU to a total daily dose of 500 mg/m<sup>2</sup> administered on days one, two, and three of their radiotherapy. After each two week rest period, the cycle was repeated. Following the completion of radiotherapy, 5 FU was continued weekly at 500 mg/m<sup>2</sup> until progression of the disease. Patient #2 was treated with weekly rapid infusion of 5-FU at 500 mg/m<sup>2</sup>, until progression of his disease. To monitor patient's hematological status, weekly complete blood counts were obtained and no therapy had to be discontinued secondary to toxicity.

### Results

The median survival of all patients was eight months with an average survival of 9.9 months. (Table II) Twenty-one patients have died and the remaining six are classified as living with disease at six to 36 months. The overall survival at one year is 40% (10/25) but only one patient has lived more than two years (patient #14 - LWD at 36 months). Seven patients treated by continuous course radiotherapy with or without chemotherapy (Table IIA) had an average survival of five months.

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Three of the seven patients were initially planned to be treated to a higher dose (6000 cGy in 10 weeks), but elected to discontinue their therapy. One of the seven patients who received 6000 cGy with concomitant chemotherapy survived 20 months. Five patients survived only one to two months after the completion of radiation therapy. The seventh patient received 6040 cGy in 33 fractions without chemotherapy and is living at six months symptom free.

The second group (11 patients) received a single split course delivering 4000-4400 cGy in 20 fractions with one two-week rest and 5 FU. (Table IIB) The average survival is 12.8 months with a range of five to 36 months. Six of 11 patients survived less than nine months. There are two patients still living at 18 and 36 months. Both are without complaints; however, CT scans demonstrate persistent tumor without progression. Both these patients represent a statistically favorable prognostic group as mentioned in the Finnish data, with an age greater than 70 years treated with 4000 cGy of radiation therapy and 5 FU chemotherapy.<sup>3</sup>

The final group of nine patients were treated with radiation therapy to doses of 5000-6600 cGy using two rest intervals with and without chemotherapy. (Table IIC) Six of the nine patients treated received chemotherapy. The average duration of survival was 10.1 months with the range being one to 18 months. The three patients who received 6000 cGy without chemotherapy had an average survival of 12.3 months. There are three patients who are still living with disease at seven, 12 and 18 months.

### Discussion

Our retrospective analysis revealed an overall average survival of 9.9 months with a median survival of eight months. Although 40% of patients lived one year, only one patient has survived more than two years. Unlike the GITSG,<sup>5</sup> our patients who received 4000-4400 cGy had a slightly longer average survival of 11.5 months whereas those receiving a higher dose (5000-6000 cGy) survived only 10.1 months. These results are most likely due to the limited number of patients in our study. The average survival of the 19 patients receiving chemotherapy given in conjunction with radiation therapy was 11.4 months. The eight patients who were treated with radiation therapy alone survived 6.3 months. Thus there is an advantage in the use of chemotherapy in conjunction with radiation therapy.

With 27 patients available for evaluation, our study shows little significant improvement in survival of patients with unresectable pancreatic carcinoma managed by combination chemotherapy and radiotherapy. The prognosis in patients with carcinoma of the pancreas remains dismal according to both local and national data. New modalities show hope for prolonging life, but to-date few cures are obtained without total resection.

**References** 1. Horn JW, Asire AJ, Young JL, Jr et al (eds): SEER Program: Cancer Incidence and Mortality in the United States 1973-1981. *NIH Publication No. 85*, 1837. Bethesda, Maryland, National Cancer Institute, 1984. 2. Silverberg Edwin and Lubera John: Cancer Statistics, 1986, *CA-A Cancer Journal for Clinicians* 36:9-25, 1986. 3. Apphqvist P, Viren M, Minkkinen J. et al: Operative Finding, Treatment, and Prognosis of Carcinoma of the Pancreas: An Analysis of 267 Cases. *J Surg Oncol* 23:143-150, 1983. 4. Moertel CG, Childs DS Jr, Reitemeier RJ, Colby MY Jr. Holbrook MA: Combined 5-Fluorouracil and supervoltage radiation therapy of locally unresectable gastrointestinal cancer. *Lancet* 2:865-867, 1969. 5. Moertel CG, Frytak S, Hahn RG, et al: Therapy of Locally Unresectable Pancreatic Carcinoma: A Randomized Comparison of High Dose (6000 rads), Radiation Alone, Moderate Dose Radiation (4000 rads + 5-FU) and High Dose Radiation + 5-Fluorouracil. *Cancer* 48:1705-1710, 1981. 6. Wood WC, Shipley WU, Gunderson LL, Cohen AM, Narchi GL: Intra-operative irradiation for unresectable pancreatic carcinoma. *Cancer* 49:1272-1275, 1982. 7. Whittington R, Solin L, Mohiuddin M, et al: Multimodality therapy of localized unresectable pancreatic adenocarcinoma. *Cancer* 54:1991-1998, 1984. 8. Cullinan SA, Moertel CG, Fleming TR, et al: A Comparison of Three Chemotherapeutic Regimens in the Treatment of Advanced Pancreatic and Gastric Carcinoma. *JAMA* 253:2061-2067, 1985. 9. Gastrointestinal Tumor Study Group: Radiation therapy combined with Adriamycin or 5-FU for the treatment of locally unresectable pancreatic carcinoma. *Cancer* 56:2563-2568, 1985. 10. Falk RE, Moffat FL, et al: Combination therapy for resectable and unresectable adenocarcinoma of the pancreas. *Cancer* 57:685-688, 1986. 11. Frey C, Twomey P, Keehn R, et al: Randomized Study of 5-FU and CCNU in pancreatic cancer: Report of the Veterans Administration surgical adjuvant cancer chemotherapy study group. *Cancer* 47:27-31, 1981. 12. Smith L, Gazet JC: Intra-arterial chemotherapy for patients with inoperable carcinoma of the pancreas. *Ann R Coll Surg* 62:208-212, 1980. 13. Handley WS: Pancreatic cancer and its treatment by implanted radium. *Ann Surg* 100:215-223, 1934. 14. Shipley WU, Nardi GL, Cohen AM, Ling CC: Iodine-125 implant and external beam irradiation in patients with localized pancreatic carcinoma. *Cancer* 45:709-714, 1980. 15. Brooks JR, Culebras JM: Cancer of the pancreas: palliative operation, Whipple procedure, or total pancreatectomy *Am J Surg* 131:516-520, 1976.

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# Internal Iliac Artery Aneurysm Presenting As Severe Constipation

DAVID W. VICTOR, JR., M.D., G. MICHAEL WERDICK, M.D.  
and RICHARD W. PROUDFOOT, M.D.

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*Aneurysms of the internal iliac artery are rare and present with many unusual symptoms arising from their compression effect on adjacent structures including testicular, inguinal, thigh and low back pain, genitourinary complaints of all types and symptoms related to the gastrointestinal tract. The case of a patient presenting with rapid onset of severe constipation who had a pulsatile mass palpable on rectal exam was found to have an internal iliac artery aneurysm on CT scan and was successfully treated with partial endoaneurysmorrhaphy of the left internal iliac artery aneurysm. In patients presenting with these symptoms related to the pelvis including severe constipation, having a pulsatile mass present on rectal, vaginal or abdominal examination, prompt diagnosis with sonography or CT scanning and subsequent treatment by surgical aneurysm obliteration can perhaps improve the clinical outcome of patients with these unusual and rare aneurysms.*

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Aneurysms of the internal iliac artery present with many varied signs and symptoms, all of which stem from the aneurysm's unusual location, deep in the pelvis. These symptoms include inguinal, testicular or anterior thigh pain, signs and symptoms of ureteric obstruction,<sup>1</sup> low back pain,<sup>2</sup> or symptoms related to compression of the gastrointestinal tract including severe constipation.<sup>3</sup> Physical exam is unique in that a pulsatile mass is frequently felt on rectal or vaginal examination and may occasionally be palpable abdominally as well.<sup>1</sup>

The following is a case report of a 73-year-old gentleman who presented with gradually increasing, severe constipation over a four week period which proved to be an internal iliac artery aneurysm.

## Case Report

The patient was a 73-year-old white male who presented with increasing difficulty of having bowel movements for over a four-week period. The only other unusual history at this time is that he had been working on a bridge and had fallen, fracturing his right 10th rib at about the same time the constipation occurred. Rectal examination revealed a smooth, easily palpable, pulsatile mass in the posterior and left side wall of the rectum. Rectally, it felt greater than 5 cm. in size and the diagnosis of a left internal iliac artery aneurysm was suspected. CT scan of the abdomen revealed the large left internal iliac aneurysmal mass filling the majority of the pelvis on the left side and arteriogram confirmed this diagnosis (Figures 1 and 2).

The aneurysm was approached through a left retroperitoneal incision in the left iliac fossa, extending up to the tip of the left 12th rib. Proximal and distal control of the common iliac artery at the aortic bifurcation and the external iliac artery distal to the iliac bifurcation were obtained. The ureter was seen coursing directly over the anterior wall of the aneurysm, but was easily dissected from the wall of the aneurysm and preserved medially. The aneurysm itself was massive (greater than 8 cm.) and blunt dissection around its external surface was relatively easy. It was found that some old blood and debris exuded from deep in the pelvis on the blunt dissection indicating a possible sealed, previous small rupture. Partial endoaneurysmectomy was performed and because the left common iliac artery seemed slightly aneurysmal at about 2 cm. of size, the superior portion of the internal iliac artery aneurysm was excised and oversewn. An end to end interposition graft of 8 mm PTFE was used to replace the excised segment of common iliac artery and this was anastomosed to the proximal external iliac artery. This procedure left a sizable (6 cm.) portion of the aneurysm intact. Postoperatively the patient did extremely well and was discharged on

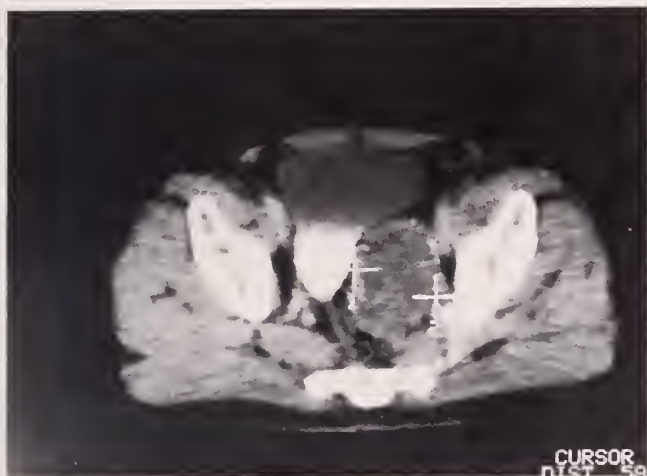


Fig. 1

approximately the sixth postoperative day. He maintained excellent pulses in his left lower extremity, and initially required some enemas to achieve bowel movements, which had been required postoperatively. By three weeks postoperative, he was having normal bowel movements and no further symptoms of constipation. Repeat rectal examination following operation revealed no pulsation and a 2 cm. (much smaller) mass.

### Discussion

Aneurysms of the internal iliac artery are rare and because of their location deep in the pelvis, defy diagnosis. They present with several different signs and symptoms, and these stem from pressure on the structures in this area. Pelvic pain in the lower quadrant or groin area, testicular or scrotal pain, buttock or thigh pain, and pain in the anterior thigh have all been described as associated with these aneurysms.<sup>1,2,3,4,5</sup> Genitourinary tract symptoms, including frequency, dysuria, nocturia, hematuria, a pulsatile nature of the urinary stream, and renal colic have also been described with these aneurysms.<sup>1,3,5</sup> GI tract symptoms including rectal bleeding and severe constipation have been described, but less commonly.<sup>3</sup> This patient is unique because of his singular complaint of severe, acutely progressive constipation. Physical findings were typical of these aneurysms in that he had a smooth, palpable, pulsatile mass which presented as an extrinsic mass on rectal exam and work up with the CT scan of the abdomen easily confirmed the diagnosis. Arteriogram in this patient revealed that the aneurysm was an isolated internal iliac aneurysm, but operation proved there was a very small aneurysmal component of the common iliac near the distal portion of the common



Fig. 2.

iliac as well. This was not shown on the arteriogram, or CT scan, satisfactorily. This patient's traumatic history of a severe fall approximately four weeks prior to his presentation in the hospital which coincided with his onset of increasing constipation may have been a factor which, although not causative of this isolated aneurysm, may have caused the small degree of leak or perhaps stimulated a more rapid expansion of the aneurysm producing the symptoms.

Although these aneurysms are rare, there is an extremely high incidence of rupture and with rupture, the mortality rate has been reported as high as 50%.<sup>1</sup> When patients present with any of the symptoms that could be related to these aneurysms, and physical exam confirms or is suspicious of a pulsatile mass, abdominally or by pelvic or rectal examination, prompt work up should be begun. We feel that sonography and perhaps more specifically, the CT scan, will give a prompt and exact diagnosis of the condition, as well as frequently delineate ureteric obstruction or involvement of the ureter in the aneurysm. It may obviate the necessity for preoperative IV pyelogram and barium enema as has been suggested previously.<sup>1</sup> Like abdominal aortic



aneurysms, any symptoms may be the sign of leak or rapid expansion. Our case is somewhat illustrative of this in that a ruptured or leaking aneurysm was not suspected preoperatively, but at the time of operation the old blood and debris that was obtained from dissection of the base of this aneurysm indicated there probably had been a small leaking component which probably produced the rapid progression of this patient's marked constipation.

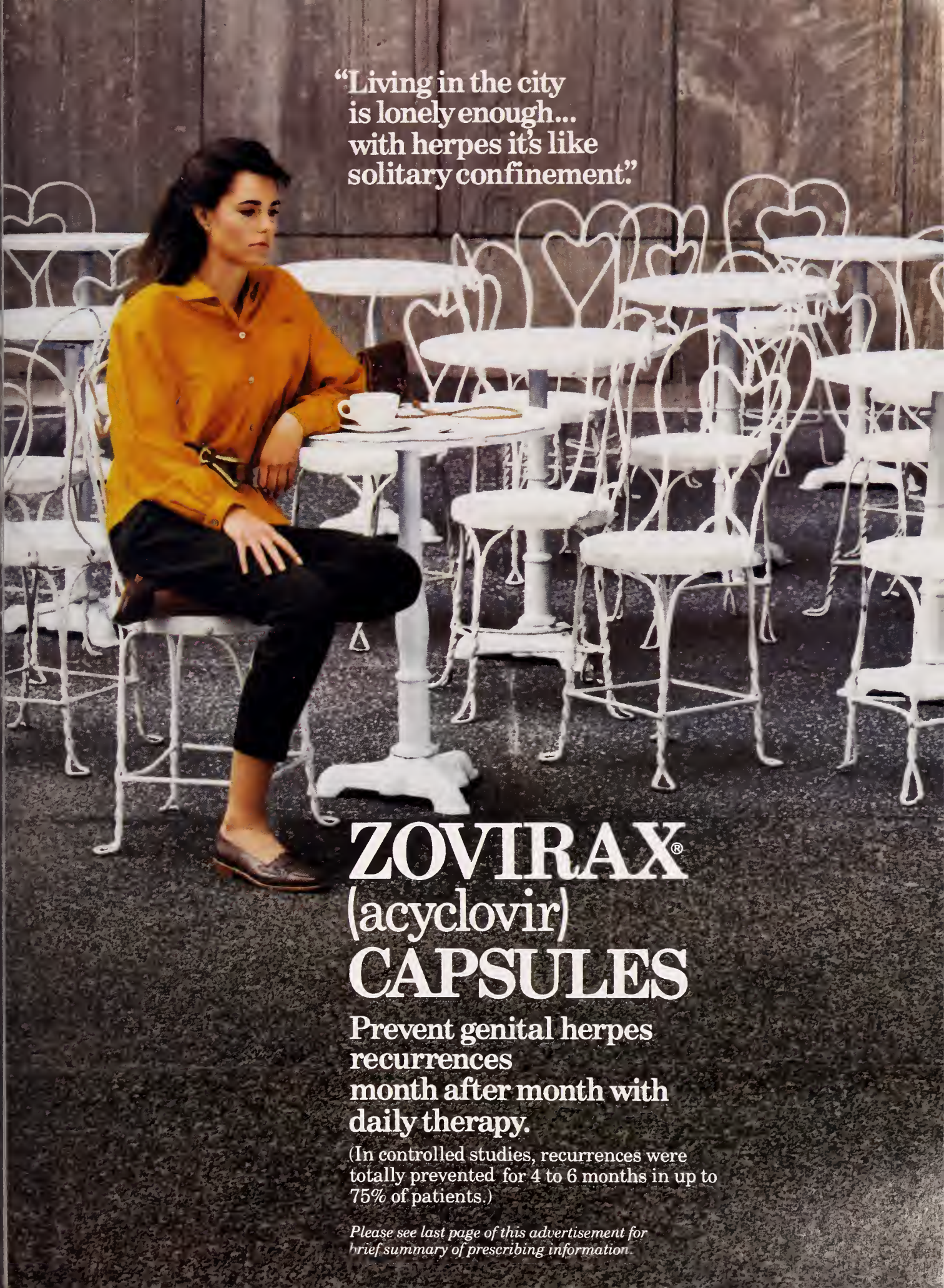
Treatment of these aneurysms has also been well described in the literature.<sup>1,2,3,4,5</sup> If the patient has only one hypogastric aneurysm, it is generally felt that one hypogastric vessel can supply more than adequate blood flow to the pelvis and, therefore, ligation or exclusion techniques are quite adequate in treating these conditions. In our case, an interposition graft was chosen because the neck of the aneurysm engulfed the iliac bifurcation and there was a very small common iliac aneurysmal component. However, the internal iliac itself was not revascularized and, indeed, revascularization to the deep branches of the internal iliac may have resulted in massive blood loss due to the depth of the aneurysm in the pelvis and the fact that in this patient it so filled the pelvis that it would have been extremely difficult to have obtained distal control. Instead, we chose endoaneurysmectomy of a partial nature, *ie*, to remove the top portion of the aneurysm only and to oversew the aneurysm in a two layer closure using permanent, heavy Prolene sutures in two layers to imbricate the top portion of the aneurysm. This produced some concern because the main part of the mass was still present in the pelvis at the time of closure; however, thrombosis of the aneurysm did occur as confirmed by postoperative rectal exam which revealed no pulsatile mass, and also the fact that the aneurysm left shrunk in size to a virtually non-palpable state by his three week postoperative visit. Exclusion by ligation or aneurysm resection we feel are the treatments of choice with a unilateral internal iliac artery aneurysm.

### Conclusions

In a patient presenting with constipation occurring over a short period of time with a palpable and pulsatile extrinsic mass rectally, by pelvic exam, or transabdominally, aneurysm of the internal iliac artery should be suspected. Other symptoms related to the obstruction or partial obstruction of the genitourinary tract and of the pelvic nervous structures presenting as testicular, thigh, or back pain should be suspect if physical examination is confirmatory of a mass that is pulsatile of having an internal iliac artery aneurysm. Such patients should be worked up promptly and with the advent of CT scanning, we feel older recommendations of barium enema and IVP are in most cases unnecessary. Arteriography can be confirmatory and should be done if the anatomy is not certain and the extent of the aneurysm cannot be proven on the basis of the other testing. Treatment should be instituted promptly in patients displaying symptoms of any type, as is the case in patients with symptomatic aortic aneurysms, and in these isolated internal iliac aneurysms should consist of ligation of the internal iliac artery or endoaneurysmorrhaphy. With suspicion of this diagnosis on history and physical examination, followed by proof of the diagnosis with diagnostic imaging techniques, early treatment can be lifesaving in these rare aneurysms with unique presentations and extremely high incidence of rupture.

**References** 1. Victor DW, Halverson JD, Butcher HR: "Internal Iliac Artery Aneurysms: Unusual Cause of Lower Abdominal and Pelvic Symptoms". *MO Med* 78:424-426, 1979. 2. Kasulke RJ, Clifford A, Nichols WK and Silver D: "Isolated Arteriosclerotic Aneurysms of the Internal Iliac Arteries: A Report of Two Cases and Review of the Literature". *Archives of Surgery*, 117- 73-77, 1982. 3. *Aneurysms: Diagnosis and Treatment*, edited by Bergen JJ and Yao JST. Iliac Artery Aneurysms by Schuler JJ and Flanagan DP. 469-485. Grune and Stratton Publ. New York, NY, 1982. 4. McCready RA, Pairolero PC, Gilmore JC, Kazmier FJ, Cherry KJ, and Hollier LH: "Isolated Iliac Artery Aneurysms", *Surgery*, 93:688-693. 5. Perdue GD, Mittenthal MJ, Smith RB, Salam AA: "Aneurysms of the Internal Iliac Artery". *Surgery*, 93:243-246, 1982.





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(In controlled studies, recurrences were  
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75% of patients.)

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**Help free your  
patients from  
recurrences.**

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Daily therapy with ZOVIRAX CAPSULES is generally well tolerated. The most frequent adverse reactions reported during clinical trials were headache, diarrhea, nausea/vomiting, vertigo, and arthralgia.

The physical and emotional difficulties posed by genital herpes are unique for each patient. The frequency and severity of recurrent episodes, as well as the emotional impact of the disease, should be considered when selecting daily therapy with ZOVIRAX CAPSULES.

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# Prevent recurrences month after month\*

## ZOVIRAX® (acyclovir) CAPSULES

### Brief Summary

**INDICATIONS AND USAGE:** Zovirax Capsules are indicated for the treatment of initial episodes and the management of recurrent episodes of genital herpes in certain patients.

The severity of disease is variable depending upon the immune status of the patient, the frequency and duration of episodes, and the degree of cutaneous or systemic involvement. These factors should determine patient management, which may include symptomatic support and counseling only, or the institution of specific therapy. The physical, emotional and psychosocial difficulties posed by herpes infections as well as the degree of debilitation, particularly in immunocompromised patients, are unique for each patient, and the physician should determine therapeutic alternatives based on his or her understanding of the individual patient's needs. Thus Zovirax Capsules are not appropriate in treating all genital herpes infections. The following guidelines may be useful in weighing the benefit/risk considerations in specific disease categories:

**First Episodes** (primary and nonprimary infections — commonly known as initial genital herpes):

Double-blind, placebo-controlled studies have demonstrated that orally administered Zovirax significantly reduced the duration of acute infection (detection of virus in lesions by tissue culture) and lesion healing. The duration of pain and new lesion formation was decreased in some patient groups. The promptness of initiation of therapy and/or the patient's prior exposure to Herpes simplex virus may influence the degree of benefit from therapy. Patients with mild disease may derive less benefit than those with more severe episodes. In patients with extremely severe episodes, in which prostration, central nervous system involvement, urinary retention or inability to take oral medication require hospitalization and more aggressive management, therapy may be best initiated with intravenous Zovirax.

### Recurrent Episodes:

Double-blind, placebo-controlled studies in patients with frequent recurrences (6 or more episodes per year) have shown that Zovirax Capsules given for 4 to 6 months prevented or reduced the frequency and/or severity of recurrences in greater than 95% of patients. Clinical recurrences were prevented in 40 to 75% of patients. Some patients experienced increased severity of the first episode following cessation of therapy; the severity of subsequent episodes and the effect on the natural history of the disease are still under study.

The safety and efficacy of orally administered acyclovir in the suppression of frequent episodes of genital herpes have been established only for up to 6 months. Chronic suppressive therapy is most appropriate when, in the judgement of the physician, the benefits of such a regimen outweigh known or potential adverse effects. In general, Zovirax Capsules should not be used for the suppression of recurrent disease in mildly affected patients. Unanswered questions concerning the human relevance of *in vitro* mutagenicity studies and reproductive toxicity studies in animals given very high doses of acyclovir for short periods (see Carcinogenesis, Mutagenesis, Impairment of Fertility) should be borne in mind when designing long-term management for individual patients. Discussion of these issues with patients will provide them the opportunity to weigh the potential for toxicity against the severity of their disease. Thus, this regimen should be considered only for appropriate patients and only for six months until the results of ongoing studies allow a more precise evaluation of the benefit/risk assessment of prolonged therapy.

Limited studies have shown that there are certain patients for whom intermittent short-term treatment of recurrent episodes is effective. This

approach may be more appropriate than a suppressive regimen in patients with infrequent recurrences.

Immunocompromised patients with recurrent herpes infections can be treated with either intermittent or chronic suppressive therapy. Clinically significant resistance, although rare, is more likely to be seen with prolonged or repeated therapy in severely immunocompromised patients with active lesions.

**CONTRAINDICATIONS:** Zovirax Capsules are contraindicated for patients who develop hypersensitivity or intolerance to the components of the formulation.

**WARNINGS:** Zovirax Capsules are intended for oral ingestion only.

**PRECAUTIONS: General:** Zovirax has caused decreased spermatogenesis at high doses in some animals and mutagenesis in some acute studies at high concentrations of drug (see PRECAUTIONS — Carcinogenesis, Mutagenesis, Impairment of Fertility). The recommended dosage and length of treatment should not be exceeded (see DOSAGE AND ADMINISTRATION).

Exposure of Herpes simplex isolates to acyclovir *in vitro* can lead to the emergence of less sensitive viruses. The possibility of the appearance of less sensitive viruses in man must be borne in mind when treating patients. The relationship between the *in vitro* sensitivity of Herpes simplex virus to acyclovir and clinical response to therapy has yet to be established.

Because of the possibility that less sensitive virus may be selected in patients who are receiving acyclovir, all patients should be advised to take particular care to avoid potential transmission of virus if active lesions are present while they are on therapy. In severely immunocompromised patients, the physician should be aware that prolonged or repeated courses of acyclovir may result in selection of resistant viruses which may not fully respond to continued acyclovir therapy.

**Drug Interactions:** Co-administration of probenecid with intravenous acyclovir has been shown to increase the mean half-life and the area under the concentration-time curve. Urinary excretion and renal clearance were correspondingly reduced.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Acyclovir was tested in lifetime bioassays in rats and mice at single daily doses of 50, 150 and 450 mg/kg given by gavage. There was no statistically significant difference in the incidence of tumors between treated and control animals, nor did acyclovir shorten the latency of tumors. In 2 *in vitro* cell transformation assays, used to provide preliminary assessment of potential oncogenicity in advance of these more definitive life-time bioassays in rodents, conflicting results were obtained. Acyclovir was positive at the highest dose used in one system and the resulting morphologically transformed cells formed tumors when inoculated into immunosuppressed, syngeneic, weanling mice. Acyclovir was negative in another transformation system considered less sensitive.

In acute studies, there was an increase, not statistically significant, in the incidence of chromosomal damage at maximum tolerated parenteral doses of 100 mg/kg acyclovir in rats but not Chinese hamsters; higher doses of 500 and 1000 mg/kg were clastogenic in Chinese hamsters. In addition, no activity was found after 5 days dosing in a dominant lethal study in mice. In 6 of 11 microbial and mammalian cell assays, no evidence of mutagenicity was observed. At 3 loci in a Chinese hamster ovary cell line, the results were inconclusive. In 2 mammalian cell assays (human lymphocytes and L517Y mouse lymphoma cells *in vitro*), positive responses for mutagenicity and chromosomal damage occurred, but only at concentrations at least 400 times the acyclovir plasma levels achieved in man.

Acyclovir has not been shown to impair fertility or reproduction in mice (450 mg/kg/day, p.o.) or in rats (25 mg/kg/day, s.c.). At 50 mg/kg/day s.c. in the rat, there was a statistically significant increase in post-implantation loss, but no concomitant decrease in litter size. In female rabbits treated subcutaneously with acyclovir subsequent to mating, there was a statistically significant decrease in implantation efficiency but no concomitant decrease in litter size at a dose of 50 mg/kg/day. No effect upon implantation efficiency was observed when the same dose was administered intravenously. In a rat peri- and postnatal study at 50 mg/kg/day s.c., there was a statistically significant decrease in the group mean numbers of corpora lutea, total implantation sites and live fetuses in the F<sub>1</sub> generation. Although not statistically significant,

there was also a dose related decrease in group mean numbers of live fetuses and implantation sites at 12.5 mg/kg/day and 25 mg/kg/day, s.c. The intravenous administration of 100 mg/kg/day, a dose known to cause obstructive nephropathy in rabbits, caused a significant increase in fetal resorptions and a corresponding decrease in litter size. However, at a maximum tolerated intravenous dose of 50 mg/kg/day in rabbits, there were no drug-related reproductive effects.

Intraperitoneal doses of 320 or 80 mg/kg/day acyclovir given to rats for 1 and 6 months, respectively, caused testicular atrophy. Testicular atrophy was persistent through the 4-week post-dose recovery phase after 320 mg/kg/day; some evidence of recovery of sperm production was evident 30 days postdose. Intravenous doses of 100 and 200 mg/kg/day acyclovir given to dogs for 31 days caused aspermatogenesis. Testicles were normal in dogs given 50 mg/kg/day, i.v. for one month.

**Pregnancy: Teratogenic Effects:** Pregnancy Category C. Acyclovir was not teratogenic in the mouse (450 mg/kg/day, p.o.), rat (50 mg/kg/day, s.c.) or rabbit (50 mg/kg/day, s.c. and i.v.). There are no adequate and well-controlled studies in pregnant women. Acyclovir should not be used during pregnancy unless the potential benefit justifies the potential risk to the fetus. Although acyclovir was not teratogenic in animal studies, the drug's potential for causing chromosome breaks at high concentration should be taken into consideration in making this determination.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Zovirax is administered to a nursing woman. In nursing mothers, consideration should be given to not using acyclovir treatment or discontinuing breastfeeding.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS — Short-Term Administration:** The most frequent adverse reactions reported during clinical trials were nausea and/or vomiting in 8 of 298 patient treatments (2.7%) and headache in 2 of 298 (0.6%). Less frequent adverse reactions, each of which occurred in 1 of 298 patient treatments (0.3%), included diarrhea, dizziness, anorexia, fatigue, edema, skin rash, leg pain, inguinal adenopathy, medication taste and sore throat.

**Long-Term Administration:** The most frequent adverse reactions reported in studies of daily therapy for 3 to 6 months were headache in 33 of 251 patients (13.1%), diarrhea in 22 of 251 (8.8%), nausea and/or vomiting in 20 of 251 (8.0%), vertigo in 9 of 251 (3.6%), and arthralgia in 9 of 251 (3.6%). Less frequent adverse reactions, each of which occurred in less than 3% of the 251 patients (see number of patients in parentheses), included skin rash (7), insomnia (4), fatigue (7), fever (4), palpitations (1), sore throat (2), superficial thrombophlebitis (1), muscle cramps (2), pars planitis (1), menstrual abnormality (4), acne (3), lymphadenopathy (2), irritability (1), accelerated hair loss (1), and depression (1).

**DOSAGE AND ADMINISTRATION: Treatment of initial genital herpes:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 10 days (total 50 capsules).

**Chronic suppressive therapy for recurrent disease:** One 200 mg capsule 3 times daily for up to 6 months. Some patients may require more drug, up to one 200 mg capsule 5 times daily for up to 6 months.

**Intermittent Therapy:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 5 days (total 25 capsules). Therapy should be initiated at the earliest sign or symptom (prodrome) of recurrence.

**Patients With Acute or Chronic Renal Impairment:** One 200 mg capsule every 12 hours is recommended for patients with creatinine clearance  $\leq 10$  ml/min/1.73 m<sup>2</sup>.

**HOW SUPPLIED:** Zovirax Capsules (blue, opaque) containing 200 mg acyclovir and printed with "Wellcome ZOVIRAX 200". Bottles of 100 (NDC-0081-0991-55) and unit dose pack of 100 (NDC-0081-0991-56).

Store at 15°-30°C (59°-86°F) and protect from light.

\*In controlled studies, recurrences were totally prevented for 4 to 6 months in up to 75% of patients.



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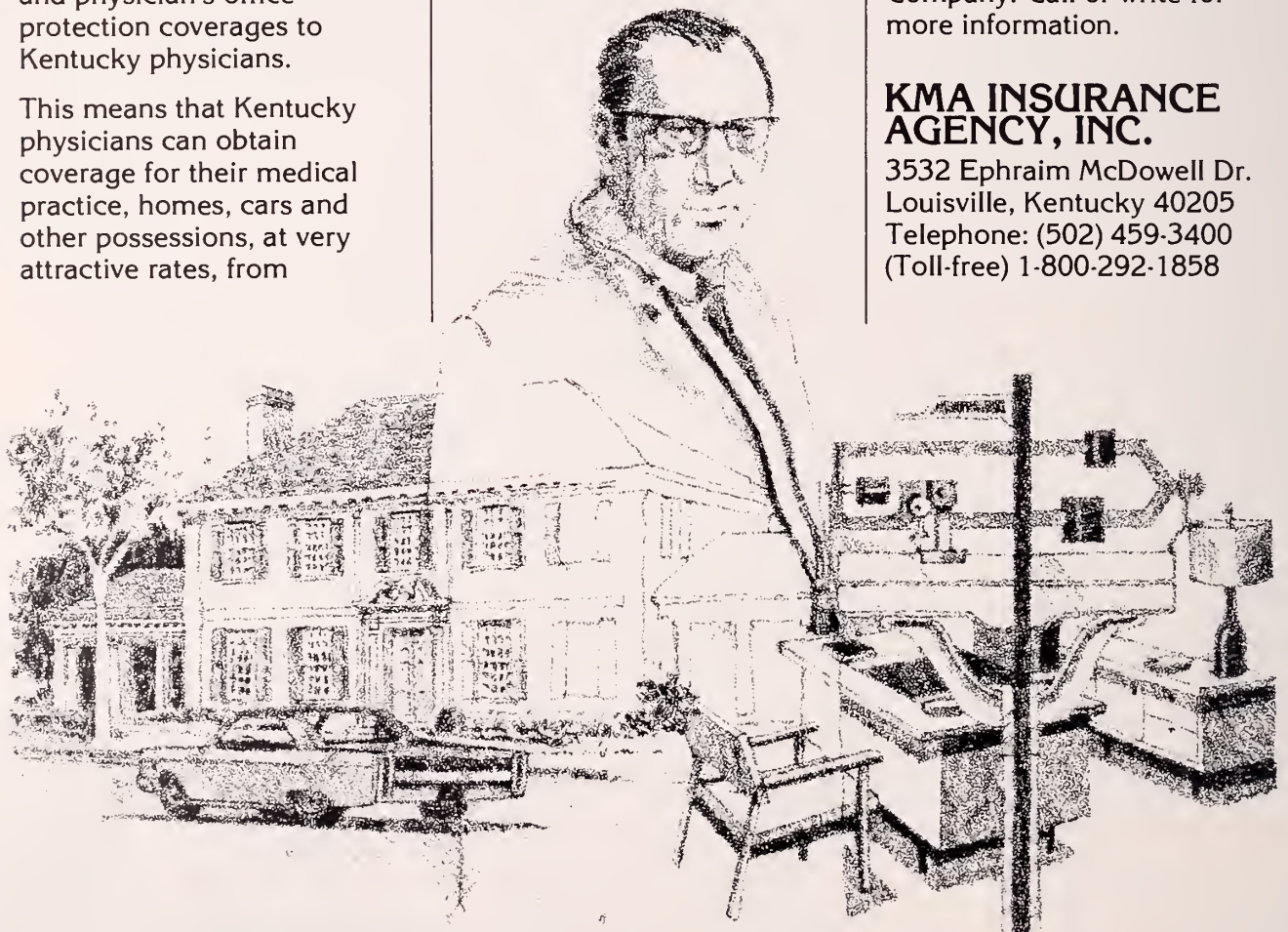
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# An Alternate Proposal for Compensating Injuries Occurring in the Health Care Delivery System

CARL L. WEDEKIND, JR., LL. B.

*This paper proposes adopting a no-fault approach to compensating injuries occurring in the delivery of health care, similar to the original approach under the Workers' Compensation system applying to injuries occurring in the work place. The proposal is based on the statistical evidence that over 60% of all the dollars spent on medical malpractice cases are spent to pay costs and attorney fees to determine fault.*

*The proposed Patients' Compensation system would determine claims administratively by a 15-member Board, assisted by an Advisory Board of medical specialists, which would also serve as a peer review board of all incidents where medical negligence is indicated.*

*The plan would compensate injuries on the basis of lost wages and medical expenses, but would exclude injuries which were inherent risks of the treatment modality and would still require proof of negligence where the injury results in death.*

*A statistical review of the costs of 100 closed claims under the current tort system compared with similar costs under the proposed Patients' Compensation system discloses that savings of almost 50% would be achieved under the Patients' Compensation system with the injured party receiving more net benefits than he is now receiving under the current tort system.*

Tort reform is being seriously debated and acted upon in many of the State Legislatures and in the Federal Congress. Proposals vary but frequently break down to the categories of a) limiting the amount of recovery; b) regulating contingency fees for attorneys; c) allowing credit for collateral source payments available to the injured party; d) providing for periodic payments rather than lump sum award, e) establishing economic incentives to promote a prompt resolution, and so forth.<sup>1</sup> The nagging question keeps surfacing, "Will any of these measures help in the availability and cost of liability insurance?", and "Are these proposals fair?"

This proposal addresses a system of reform which will, if carried out properly, help directly in both the cost and availability of professional liability insurance for physicians, hospitals, and other health care providers and is intended to contain the basic tenets of fairness. The proposal is the result of several years of research and review and embodies a number of ideas from different sources and the thoughts and experiences of the author.<sup>2</sup> No claim of originality is made unless it be in the perceived uniqueness of the overall plan.

This proposal relates only to medical professional liability insurance problems, because of the conviction that the area of medical malpractice is unique in the tort system and should be dealt with separately from other liability insurance problems.

The basic assumptions that form the framework of the proposal are these:

1. Persons who are injured in the health care system should be compensated.
2. Persons, or institutions, responsible for such injuries should be held accountable.
3. Provable fault should not be a requisite to recover compensation for an injury other than death.
4. The inherent identifiable risk of any modality of treatment should be excluded from coverage, and that risk insured through a separate mechanism.
5. The current tort system for determining medical malpractice has a serious economic flaw as the majority of all claims dollars are being spent to determine the question of fault.

The statistics that led to this proposal are the results of closed claims studies done by the Kentucky Medical Insurance Company, (KMIC), a physician owned medical malpractice company. These statistical studies are similar in results to closed claims studies done by other medical malpractice carriers.<sup>3</sup>

The 30-month period covered by this study is from January 1, 1984 to June 30, 1986, and includes all medical malpractice claims closed by KMIC in that time span.

Of the 268 closed claims studied it was determined that in 112 cases (42%) there was liability. That is, there was a recognized standard of care that had not been met. The average indemnity payment to the plaintiff for all 112 liability cases was \$53,367. The average cost to defend these 112 cases (defense lawyers, expert witness, depositions, court costs, etc.) was \$8,166 for a total average cost on liability cases of \$61,533.

On those cases where we, or a judge or



jury, determined there was no liability (156 cases, 58%), there were zero indemnity payments made and the average defense cost per claim was \$5,304.

The total 268 claims cost, for both indemnity payments and defense costs, was \$7,845,679. The breakdown is as follows:

Indemnity payments	\$5,977,065
Defense costs	1,868,614
Total	\$7,845,679

The indemnity payments are made directly to the plaintiff and his or her attorney. We are advised that the average contingent attorney's fee on medical malpractice cases in the Kentucky area currently is 40%, and the plaintiff's expert witness, depositions, and other costs are on top of that and can be currently estimated at about 10%. So the plaintiff receives approximately 50% of the indemnity settlement.<sup>1</sup>

Thus the use of the \$7,845,679 total paid out on these 268 claims breaks down as follows:

To the Plaintiff	\$ 2,988,532	38%
To the Plaintiff's attorney and costs	2,988,532	38%
To the Defendant's attorney and costs	1,868,614	24%
Total	\$ 7,845,679	100.0%

Thus of the total \$7,845,679 paid on these claims, 62%, \$4,857,146 went to attorneys and the cost of the system.

The object of this proposal is to achieve reallocation of those dollars so that the claimant will receive more of the total dollars spent, and the system will receive less. This can be achieved through a modified no-fault system patterned somewhat after the Workers' Compensation laws, which this proposal calls "The Patients' Compensation Plan."<sup>2</sup> The basic tenets of this plan are these:

1. Those who are injured in using the health care system should have a source to recover reasonable compensation for those injuries, regardless of fault.

2. Such compensation should be paid by the health care provider in some instances and should be borne by the patient in some instances, the test being:

a. If the injury is the result of an inherent risk, previously identified and made known, of the health care procedure

being followed, then the economic burden falls on the patient who will have access to health and accident insurance to cover the risk.

b. If the injury is due to some other cause within the health care delivery system, either negligence or unknown cause, then the economic burden falls on the health care provider, who will have access to liability insurance to cover the risk.

3. The procedure for determining reasonable compensation to be paid by the health care provider is a procedure similar to Workers' Compensation whereby medical costs and lost income are dealt with on an actual, as occurring basis, and the claimants legal fees are regulated.

4. Cases in dispute would be heard by a hearing officer as in Workers' Compensation and decided by a Patient's Compensation Board similar to the Workers' Compensation Board, with two major additions:

a. The Patients' Compensation Board would have an advisory board of medical specialists to render opinions on "inherent risk" questions and technical medical questions.

b. The Patients' Compensation Board would have, as part of its operations, procedures for peer review of all medical procedures involved in claims and prompt referral to licensure boards or regulatory bodies of incidences of apparent deviation from a reasonable standard of care.

5. Each patient would have the opportunity to elect not to be covered under the system, just as each worker can elect not to be covered by Workers' Compensation, in which case a claim for an injury would be dealt with in the existing court system.

6. The plan would cover all aspects of the health care system and all the licensed professionals and institutions.

7. Some of the details of the procedures are as follows:

a. Each patient entering the health care delivery system would come under the plan, unless he elected in writing not to. Each health care professional and institution would be required to come under the plan.

b. The "inherent risk" would have to be determined in advance and specified in writing, as is currently done under the doctrine of "informed consent." These determinations would be made by the health care professional with the assistance of his specialty society or the Advisory Board to

the Patients' Compensation Board.

c. When a compensable incident occurs, the patient must give prompt notice, and a claim must be brought within one year of the occurrence, with a five-year cap for discovery, and by a minor under six, by his eighth birthday.

d. Compensation will be paid in the form of all necessary medical attention and lost wages under a formula similar to the Workers' Compensation formula. When the injured party is a non-wage earner, compensation can be paid for lost services or for future lost wages.

e. Compensation can be offset by other collateral sources of payment available to the patient, less the cost of obtaining such collateral source. Compensation is limited to economic losses.

f. Rehabilitation is a major part of the recovery benefits, as it is in Workers' Compensation.

g. Death is a compensable event only when there has been negligence as a causative factor.

h. Special provisions are made for emergency treatment where inherent risk can't be communicated and where there is no real opportunity for a patient to elect to come under the act.

i. Compensation can be increased where there is serious fault and decreased when the patient does not follow instructions.

j. Continuing physical exams of claimant can be required, and medical and hospital bills must be reasonable and are under the control of the Board.

k. Cases may be subsequently reopened where the disability has improved or worsened.

l. Attorney's fees for the claimant are limited to 20% of the first \$25,000 of recovery, 15% of the next \$10,000 and in no case to exceed \$6,500. These fee limitations are identical to the current Workers' Compensation act in Kentucky.

m. The Patients' Compensation Board of 15 members would hold hearings in panels of three. The 15 members are split with five members from the health care delivery system, five from the legal profession, and five from the public.

n. The Board would have hearing officers who would gather the facts and make recommendations, as in Workers' Compensation.

o. The Board would receive administrative services from the State Department

for Human Resources, or a like governmental Agency.

p. The Advisory Committee to the Board would be all health care professionals with access to Ad Hoc Committees from all the specialties and institutions.

q. There would be continuing peer review by the reporting of incidents to the Board, and the review of such incidents by the Advisory Committee with referral to the licensing boards where appropriate.

r. Patients coming under Federal Tort Law would be exempt from this act.

s. No cases would go to court for a jury trial. There would be limited appeals from Board decisions to the Circuit Court.

t. Insurance will be available to health care providers, who may also become self-insured or pool their risk as currently in Workmen's Compensation.

u. Insurance will be available to patients to cover inherent risks, and would be health and accident insurance policies somewhat similar to "trip insurance."

v. There are penalties for bringing claims without reasonable grounds.

The major changes that this proposal will bring over the current tort system are set out below, with some comments pro and con on their anticipated effects.

a. Everyone who is injured in the system would be compensated without regard to fault, except in the case of death, or when the injury is an inherent risk.

Many observers believe that a "no-fault" system would bring to the surface many injuries that are occurring in the health care system and are not being prosecuted now because of the cost and difficulty involved. They believe that even though the proposed system might be less expensive on the known claims, the "unknown" claims that would come to light would cause expenses to soar.<sup>6</sup>

My response is that there probably are a lot of injuries that the proposed system would uncover — but if they are occurring why shouldn't they come to light? To the extent that these new claims are exposed, economic pressures would work towards eliminating the causes. The costs of these injuries are now being borne by some segment of society and the more we know about them the better we could deal with them.

Death is excluded from the no-fault system because almost all deaths take place within the system and can't be compensable unless there was negligence in

causing the death.

b. All injuries would be reported to a responsible body for peer review and appropriate steps could be taken to eliminate the causes.

Currently a negligent act in the delivery of health care can result in monetary damages paid by an insurance company, but little else happens. Under Kentucky law the insurance companies report all claims payments to the Department of Insurance which in turn advises the Kentucky State Board of Medical Licensure of the name of the doctor and the amount of the settlement, and if a doctor gets enough paid claims against him the Medical Licensure Board will look into it. This is far short of an efficient on-going process of review of the quality of medical care. This proposal provides the mechanism, and makes it mandatory, that continuing peer review of quality of care be performed, and ties the system directly into the responsible licensing authorities and brings the scrutiny not only of doctors, but on all providers in the health care delivery system.

Critics will most likely say we will be creating another bureaucracy that will interfere and hassle the health care system, and make it more expensive. In my opinion the review system would have to be well run, or the critics could be right.

c. The identification of inherent risks and the elimination of compensation for such risk.

The technological and scientific developments in diagnostic techniques and treatment and the invasiveness of many of these, and the development and use of new drugs, all lead to increasing risks in our health care system. This proposal requires that these inherent risks be determined and disclosed in writing and in advance to the patient. This is currently being done (or should be done) to satisfy the requirements of "informed consent." There is often the question of "how great is the risk" and might the patient be better off not knowing some of the risks. This proposal is in favor of disclosure and the patient knowing the risks. It is believed that the pressures to determine and disclose risks in order to avoid possible liability, in conflict with the often existing pressures to proceed with treatment and minimize any real analysis of risks, will result in an accommodation where risk will be determined and disclosed in a reason-

able manner. There is also, as part of this proposal, an Advisory Board to the Patients' Compensation Board made up of medical expert professionals who will assist in determining inherent risks and in settling disputes concerning them.

There are conflicting views on the treatment of risks in modern medicine and some of those concerned with hospital occupancy and expensive procedures may feel that the disclosure requirements are too stringent, and not necessary, and not in the patient's best interest. The author of the proposal believes otherwise.

Where injuries occur because of an inherent risk in any procedure, there will be made available accident and health insurance applicable to these inherent risks that an individual is assuming, and this insurance will be available like "trip insurance" for a premium to each patient as he enters the system. This "trip insurance" will be offered by private insurance carriers.<sup>7</sup>

d. The proposal would change the current statute of limitations applied to minors.

The proposal adopts the existing statute of limitations in Kentucky on medical malpractice claims for adults of one year (with five years for discovery), but changes the rule as to minors. Currently no limitations run against minors until they reach their 18th birthday, and the proposal changes this so that the statute starts to run at age six. This means that a parent or guardian would have to assert a claim for a minor over six years of age in the same way a claim has to be made by an adult.

Critics will assert that this is unfair to impose on one who cannot fend for himself and may later disagree with a parent or guardian's decision on prosecuting a claim. I believe, in fact, almost all serious claims involving minors are brought promptly by the parent because of the economic necessities, and leaving the door open for a claim for as much as 23 years brings unfair uncertainty and exposure to pediatricians and obstetricians. Many states have adopted similar statute of limitations for minors.<sup>8</sup>

e. The proposal will do away with jury trials.

There will no longer be any necessity for a jury trial to determine fault. The questions will be: was there an injury; was it caused by the health care system; was it an inherent risk. If the answer to the first



Table A  
Comparison of Payments and Distribution  
100 Closed Files

Tort System		Patients' Compensation System	
Total Paid	8,064,156	Total Paid	4,358,232
Indemnity Payments	7,170,099	Indemnity Payments <sup>12</sup>	4,165,732
To Claimant	3,585,050	To Claimant <sup>13</sup>	3,938,473
To Claimant's Attorney <sup>4</sup>	2,868,049	To Claimants' Attorney <sup>14</sup>	180,759
To Costs <sup>4</sup>	717,000	To Costs <sup>14</sup>	46,500
	7,170,099		4,165,732
To Defendant's Attorney and Costs <sup>11</sup>	894,057	To Defendant's Attorney and Costs <sup>15</sup>	192,500
	8,064,156		4,358,232
<b>Total Insurance Costs<sup>16</sup></b>	<b>8,064,156</b>	<b>Total Insurance Costs</b>	<b>4,358,232</b>
<b>Net to Claimants</b>	<b>3,585,050</b>	<b>Net to Claimants</b>	<b>3,938,473</b>

two questions is yes, and to the third question is no, then an award must be determined. All of these decisions will be made by an Administrative Board in informal procedures with very little expense.

If the concept of no fault is accepted then there can be little criticism of eliminating jury trials. They are not needed. But critics will object as the right to a jury trial lies deep in our anglo-saxon experience over some 800 years. It has been our major civil system for holding people accountable for their acts.

It is the foundation of this proposal that jury determination of fault in a medical malpractice case is so expensive we can no longer afford it, and therefore we do away with fault in awarding compensation and substitute a more efficient and professional system of accountability through peer review of all accidents and claims. We eliminate the expenses, but maintain the deterrence.

Critics will also question the creation of another Board, another government bureaucracy, another political entity and the further intrusion of government in the private practice of medicine. These are serious concerns. But the bottom line is the private practice of medicine is already a public matter and the cost of medical malpractice is a public concern and the purpose of government is to deal effectively with social problems. We have a social problem and if government is further involved we must see to it that it is done effectively.

f. Attorney fees are regulated.

The proposal adopts the regulation of claimant's attorney fees that is now the law in Kentucky in Workers' Compensation

cases — 15% to 20% of the award, not to exceed \$6,500 in any case. This will reduce these costs to claimants, on average, by over 60%.<sup>9</sup>

Additionally, the defense attorney costs on a contested case in Workers' Compensation average between \$2,250 and \$2,500. This reduction over current defense costs will also average over 60%. These savings, along with savings on expensive expert witnesses, and the recoveries from collateral source prepaid medical insurance are the economic basis that will make this proposal work.

g. The proposed compensation benefits are limited, exclude any award for pain and suffering, and the plan takes advantage of some collateral sources available for reimbursement.

The proposal has adopted the payment schedule currently in effect in Kentucky for Workers' Compensation which pays all medical expenses, actual lost wages with a cap equal to the average wage in Kentucky, and no award for pain and suffering.

Critics may assert that the limitations are arbitrary and are unfair to the injured. They could be right, it depends upon your perspective and beliefs, concerning the allocation of resources. The system was chosen because it actually works fairly well in Workmens' Compensation cases in Kentucky and it does cover all, or the major part, of the true economic loss, and it has the flexibility to be increased or decreased according to the future needs of the injured party. If there are adequate resources available the structure of the awards could be increased and awards of pain and suffering could be included. It is

my belief that this should not be considered until some experience has been achieved with the plan in effect.

In many of our states, including Kentucky, there are serious problems over the increasing costs of long standing Workers' Compensation systems and the question logically arises whether the proposed Patients' Compensation system will inherit these cost problems. The answer initially at least, is no. In Kentucky, for instance, the major increases in costs have developed from the Special Fund and the Kentucky Reinsurance Association; neither of which are involved in the traditional Workers' Compensation insurance system, and neither will exist under the Patients' Compensation system.

It is true, however, the largess of a state legislature or of the courts can subsequently effect any system of compensation for injury, but the specific terms of this Patients' Compensation proposal will hold costs to reasonable and predictable levels. These costs are projected in detail in the next section of this paper.

h. Comparative cost analysis.

A group of 100 closed claims handled by the Kentucky Medical Insurance Company under the existing tort system were selected for a cost analysis to compare the actual amount and distribution of payments under the tort system with the anticipated payments and distributions under the proposed Patients' Compensation system. This group of claims are from the same 30 month study group referred to earlier in this paper, but were selected from the most recent period to more adequately reflect our current results.<sup>10</sup>

These closed claims run the gamut

from the very serious to the very trivial; some were settled, some went to trial and some were dismissed or abandoned. We know the actual costs under the tort system and we have determined the probable costs under the Patients' Compensation system.

These results clearly disclose the waste of economic resources in trying to determine fault under the current tort system, and how a Patients' Compensation system, properly administered can produce better net benefits to the injured parties for about half the cost.

**(This comparative cost analysis is set forth in Table A)**

I envision a system where an individual entering any health care facility would become a member of the Patients' Compensation plan and would be informed of the inherent risks, if any, of the treatment he is to receive. He will have available to him health and accident insurance to cover those inherent risks. He will further have the Patients' Compensation plan to provide benefits if he is injured by negligence or unknown cause. In the event of such injury, he or his family would fill out a simple claim form which would be processed by the health care facility or its insurance carrier. A prompt determination would be made if this was an injury which was not an inherent risk, and a prompt determination of benefits for lost income and medical expenses would be made and would be paid. If there is evidence of negligence by any health care provider, the claim will be referred by the Patients' Compensation Board to its medical specialist Advisory Board which would review the facts of the claim and if necessary refer the matter on to the appropriate licensing authority for peer review and remedial action.

Absent from this system are the costs and delays that have become the most prominent feature of determining fault under our current Court system.

What is proposed is that one or more states establish a five-year experimental program to test the fairness and efficiency of the proposed Patients Compensation system; enact the legislation which is detailed in this proposal with a five-year sunset provision and establish methods for monitoring the effects on those injured, as compared to the general results currently under the tort system, and monitoring the cost to the insurance carriers offering the

Patients' Compensation coverage.<sup>17</sup> If the studies done thus far are correct there should be a substantial reduction in cost without a concomitant net loss to those injured in the health care system.

## Notes

1. *Business Insurance*, August 18, 1986, presents the most recent compilation of State Legislative actions during 1986 in tort reform. More than 16 states have adopted some cap on non-economic damages, 13 states have statutes allowing for periodic payments, 6 states regulate attorneys contingent fees, and 11 states have recently enacted statutes allowing for credit for collateral source payments. A number of other state legislatures enacted similar legislation during the medical malpractice crisis in the mid seventies.

In Congress, The *Moore-Gephardt Bill* (H.R. 3084, the "Medical Offer and Recovery Act") is pending before the Ways and Means Committee, and has been under consideration for the last several years. This proposal is to encourage prompt offers of settlement in medical malpractice cases and to limit recoveries to economic damages. The Bill contains an approach recommended by Professor Jeffrey O'Connell of the University of Virginia Law School. See: *H. Moore, J. O'Connell, "Foreclosing Medical Malpractice Claims by Prompt Tender of Economic Loss," Louisiana Law Review*, Volumn 44, #5, May 1984.

There has also been introduced in Congress the "Federal Tort Claim Reform Act of 1986," the "Government Contractor Liability Reform Act of 1986," and the "Product Liability Reform Act of 1986," all supported by the Administration and dealing with many of these same proposed remedies.

2. The author, Carl L. Wedekind, Jr., is an attorney (University of Virginia, 1950) who was in the private practice of law (Stites & Harbison) in Louisville, Kentucky from 1954 to 1981. He specialized in civil law including tort litigation (primarily, but not exclusively, for Defendants) and general corporate and insurance law. As attorney for the Kentucky Medical Association he set up a physician-owned medical malpractice insurance company (the Kentucky Medical Insurance Company) on behalf of Kentucky doctors and served as General Counsel and Director (1978 - 1980) and in 1981 became President and Chief Executive Officer of Kentucky Medical Insurance Company, in which capacity he still serves.

The author has been aided by too many people and their individual ideas to attempt to list, with the exception of two: Mr. Glen Schilling, a prominent Louisville attorney and past president of International Association of Industrial Accident Boards and Commissions, and a member of the Kentucky Workmen's Compensation Board, who provided technical expertise in regard to Workmen's Compensation law; and Mr. Larry Hamfeldt, also a prominent Workmen's Compensation

attorney, who assisted in doing the economic closed claims study in converting the costs of cases under the tort system to the proposed Patients' Compensation system.

3. The Physicians Insurers Association of America (PIAA) compiles data from all the physician owned medical malpractice carriers, and the consistency of the data can be seen in their periodic reports. The most recent is the "1985 PIAA Data Sharing Reports," covering 4,760 closed medical malpractice files.

4. The Plaintiff's attorney's contingent fee and costs is an estimate based on informal polls conducted by the KMIC claims department personnel. The amount will vary depending on rural-urban considerations, and the seriousness and difficulty of the case. The average contingent fee selected is 40% of the gross recovery with additional expenses estimated at 10%.

5. A Workmens' Compensation type approach is under consideration in a number of forums. In Missouri, Representative Banton introduced H.B. 1628, "Medical Injury Compensation Law" which limits recovery to economic losses but does require the proof of negligence. No reported action was taken in the Legislature on this bill.

In Michigan, during the 1977 Legislature, a bill was introduced for the establishment of a State Medical Compensation Board, but the bill was not passed.

In Florida, State Senator Dempsey Barron introduced, "An Act Relating to Medical Incident Compensation," which would remove malpractice disputes from tort law and place them in equity under contract law and thus eliminate a jury trial. The 1986 Legislature failed to act on this bill.

The Workmens' Compensation approach has also been supported by a Tallahassee, Florida attorney, Frederick B. Karl, and a Wharton School of Finance professor, Patricia M. Danzon.

There may well be others that have not come to the author's attention.

6. The "Alliance of American Insurers" for instance established the Alliance Medical Malpractice Task Force which reviewed the issue of Workmens' Compensation type schedules for malpractice claims. Mr. John P. Waligore, attorney for the Alliance, reported to my colleague, Glen Schilling (by letter of May 22, 1986), "Our Task Force rejected this approach because we viewed it as inappropriate at both the state and federal levels. We felt that such a system would not cut total claim costs because it could increase the frequency of claims brought significantly. Such a system would make claims much easier to bring and would make the certainty of an award much greater. The Task Force believed that a Workers' Compensation type system would probably increase total claim costs because claims that would formerly have been of too small value to merit filing an action in court would not be brought administratively. The Alliance does not recommend support for such a system."

7. The Kentucky Medical Insurance Company is prepared, subject to the approval of the appro-



appropriate State Department of Insurance, to offer this coverage.

8. Alabama provides a minor under four has until his eighth birthday; Indiana provides a minor under six has until his eighth birthday, and the two year statute applies thereafter. The courts in other states, such as New Hampshire, Ohio and Texas have declared provisions similar to these to be unconstitutional under their state constitutions.

9. The current average payment per indemnity case on closed files studied by the Kentucky Medical Insurance Company is \$53,000, of which it is estimated 40%, \$21,200, goes to the attorney. Thus the proposal would reduce the cost to a maximum of \$6,500, a saving of at least \$14,700.

10. After the exclusion of duplicate files where they was only one incident but a number of defendants, and the exclusion of some of the trivial claims where there would be no award or significant expense under either system, the remaining files compose the 93 included in the study.

11. Defendant's Attorney fees and costs are actual payments made in the 100 closed files.

12. Indemnity under the proposed Patients' Compensation plan is a combination of lost earnings, past medical expenses incurred and esti-

mated future medical expenses. For the 100 cases, the total past and estimated future lost wages were computed on the Kentucky Workmen's Compensation formula and discounted to a lump sum payment, and totaled \$3,311,996. The medical payments totaled to \$2,125,909 before recovery of health insurance reimbursement, which was \$1,272,172 leaving net medical payments of \$853,737.

Industry estimates in Kentucky are that 85% of the population has some type of prepaid health insurance covering an average of 75% of total costs.  $.85 \times .75 = .64$ . From this recovery we deduct the estimated premium paid for the health insurance (\$75.00 per month) for a 2 year period, \$1,800 per case. This computation results in the net medical payout of \$853,737. Thus, the total indemnity of lost wages and past and future medical expenses totals \$4,165,732 for the 100 cases.

13. This is net to claimant after deducting estimated costs and attorney fees.

14. Claimants costs for attorneys in contested claims are regulated by the proposal in the same way they are regulated in Workmen's Compensation cases — a contingency fee limited to 20% of the first \$25,000 lost wages recovered, 15% of the next \$10,000, with a \$6,500 cap. On the 100

closed claims studied, there were 19 cases where the full \$6,500 fee would be earned, for a total of \$123,500 and the total of the remaining awards produced an additional \$57,259 in attorney fees, for a total of \$180,759.

The additional costs for presenting the claims is estimated at \$1,500 per case times an assumed 33% of the cases (31).  $31 \times 1,500 = \$46,500$ .

15. The Defendant's costs for attorney's in contested Workmen's Compensation cases in Kentucky are not regulated and it is estimated in the industry that the average costs to defend these cases is between \$2,250 and \$2,500. We selected \$2,500 as the average amount to be used and applied it to every closed claim in which we had paid defense costs. This was 77 out of the 100 files for a total cost to the defendant of \$192,500.

16. These costs include payments made by all defendants in these closed claims, and thus are significantly higher than the earlier study which only included KMIC's costs.

17. The Kentucky Medical Insurance Company will be prepared to offer this coverage, subject to approval of the appropriate State Department of Insurance, on a trial retrospective premium basis.

# CONFIRMED

CONFIRMED BY CLINICAL EVIDENCE

ZANTAC® 150 h.s.

ranitidine HCl/Glaxo 150 mg tablets

EFFECTIVE MAINTENANCE THERAPY

for healed duodenal ulcer patients

See last page for references and  
Brief Summary of Product Information.

**Glaxo** / 



# CONFIRMED

In two randomized, double-blind, and well-controlled clinical trials, ZANTAC 150 mg h.s. significantly superior to cimetidine 400 mg h.s. for maintenance therapy in healed duodenal ulcers.

Percent of patients with observed duodenal ulcer recurrence

		0-4 months	0-8 months	0-12 months	No. patients
USA <sup>1</sup>	ranitidine 150 mg h.s.	9%	14%*	16%†	60
	cimetidine 400 mg h.s.	23%	34%	43%	66
UK, Ireland, Australia <sup>2</sup>	ranitidine 150 mg h.s.	8%‡	14%‡	23%‡	243
	cimetidine 400 mg h.s.	21%	34%	37%	241

\*p=0.02

†p=0.01

‡p<0.004

%=life-table estimates

All patients were permitted prn antacids for relief of pain.

These two trials used the currently recommended dosing regimen of cimetidine (400 mg h.s.) and ranitidine (150 mg h.s.). A comparison of other dosing regimens has not been studied.

The studied dosing regimens are not equivalent with respect to the degree and duration of acid suppression or suppression of nocturnal acid.

The superiority of ranitidine over cimetidine in these trials indicates that the dosing regimen currently recommended for cimetidine is less likely to be as successful in maintenance therapy.

Convenient once-a-night dose with a  
low incidence of side effects<sup>3</sup>

Headache, sometimes severe, seems to be related to ranitidine administration. Other side effects have been reported; for a complete listing, see the ADVERSE REACTIONS section in the Brief Summary.

No significant interference with the hepatic cytochrome  
P-450 enzyme system at recommended doses

ZANTAC 150 mg has no significant drug interactions with theophylline, phenytoin, or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications that decrease gastric acidity are administered.

***Zantac<sup>®</sup> 150***  
*ranitidine HCl/Glaxo 150 mg tablets*

One tablet at bedtime  
for maintenance

See next page for references and  
Brief Summary of Product Information.

**Glaxo** /  **ROCHE**



# CONFIRMED

## Zantac 150

ranitidine HCl/Glaxo 150 mg tablets

*One tablet at bedtime for maintenance therapy  
in healed duodenal ulcer patients*

### References:

1. Silvis SE, Griffin J, Hardin R, et al: Final report on the United States multicenter trial comparing ranitidine to cimetidine as maintenance therapy following healing of duodenal ulcer. *J Clin Gastroenterol* 1985;7(6):482-487.
2. Gough KR, Korman MG, Bardhan KD, et al: Ranitidine and cimetidine in prevention of duodenal ulcer relapse: A double-blind, randomised, multicentre, comparative trial. *Lancet* 1984;ii:659-662.
3. Data available on request, Glaxo Inc.

**ZANTAC<sup>®</sup> 150 Tablets**  
(ranitidine hydrochloride)  
**ZANTAC<sup>®</sup> 300 Tablets**  
(ranitidine hydrochloride)

### BRIEF SUMMARY OF PRODUCT INFORMATION

The following is a brief summary only. Before prescribing, see complete prescribing information in ZANTAC<sup>®</sup> product labeling.

**INDICATIONS AND USAGE:** ZANTAC<sup>®</sup> is indicated in:

1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy and is maintained throughout a six-week course of therapy.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

**CONTRAINDICATIONS:** ZANTAC<sup>®</sup> is contraindicated for patients known to have hypersensitivity to the drug.

**PRECAUTIONS:** Symptomatic response to ZANTAC<sup>®</sup> therapy does not preclude the presence of gastric malignancy.

Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see **DOSE AND ADMINISTRATION**). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

False-positive tests for urine protein with Multistix<sup>®</sup> may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Although recommended doses of ZANTAC do not inhibit the action of cytochrome P-450 enzymes in the liver, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Lack of experience to date precludes recommending ZANTAC for use in children or pregnant patients. Since ZANTAC is secreted in human milk, caution should be exercised when administered to a nursing mother.

**ADVERSE REACTIONS:** Headache, sometimes severe, seems to be related to ZANTAC<sup>®</sup> administration. Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain have been reported. There have been rare reports of malaise, dizziness, somnolence, insomnia, vertigo, tachycardia, bradycardia, premature ventricular beats, and arthralgias. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

In normal volunteers, SGPT values were increased to at least

twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

There have been rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Although controlled studies have shown no antiandrogenic activity, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Incidents of rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia, have been reported, as well as rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

**OVERDOSAGE:** Information concerning possible overdose and its treatment appears in the full prescribing information.

**DOSE AND ADMINISTRATION: Active Duodenal Ulcer:** The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

**Maintenance Therapy:** The current recommended adult oral dosage is 150 mg at bedtime.

**Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome):** The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

**Benign Gastric Ulcer:** The current recommended adult oral dosage is 150 mg twice a day.

**GERD:** The current recommended adult oral dosage is 150 mg twice a day.

**Dosage Adjustment for Patients with Impaired Renal Function:** On the basis of experience with a group of subjects with severely impaired renal function treated with ZANTAC, the recommended dosage in patients with a creatinine clearance less than 50 ml/min is 150 mg every 24 hours. Should the patient's condition require, the frequency of dosing may be increased to every 12 hours or even further with caution. Hemodialysis reduces the level of circulating ranitidine. Ideally, the dosage schedule should be adjusted so that the timing of a scheduled dose coincides with the end of hemodialysis.

**HOW SUPPLIED:** ZANTAC<sup>®</sup> 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC<sup>®</sup> 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

**Store between 15° and 30° C (59° and 86° F) in a dry place. Protect from light. Replace cap securely after each opening.**

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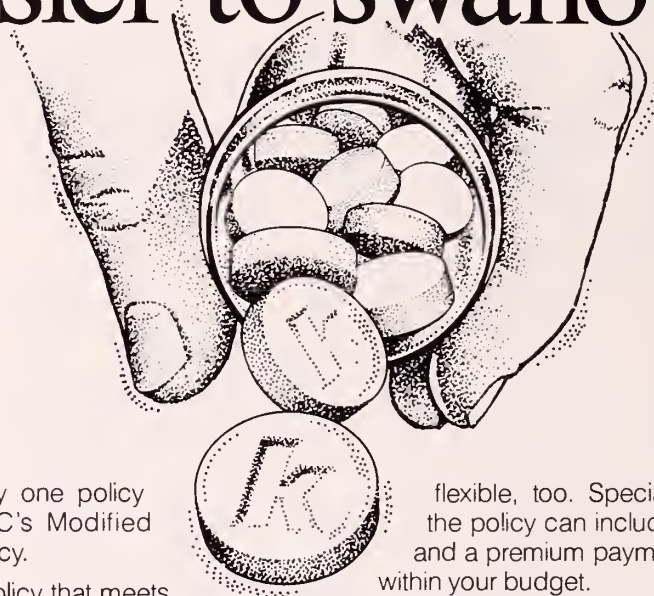
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**H**ow many times have we all heard this scenario? "Doctor, how come you charge so much? Medicare does not reimburse anywhere near that amount." Then we have to stop, sit back and carefully explain the difference between Medicare allowance and physician charges. Even when the patient hears our explanation they may still have the feeling of being gypped or gouged, not by the government, but by the doctor.

Is good medical care or even adequate medical care to become a commodity to be bargained for, much as a trinket at a flea market? I don't know of any field of endeavor outside of medicine whereby the price and the charges are so controlled by outside forces. Not in the food service business. Not in the legal system. Not in professional sports. Not in the automotive industry. Not in construction work. Not in education. Not in energy supply. Not in transportation. Not in a myriad of other kinds of occupations has control been so usurped by others as in medicine.

Insurance companies seem to be working both sides of the street; and sometimes a third side. The insurance industry regulates and sets the soaring premiums of malpractice insurance. They sell or broker hospitalization insurance and then they hire a para-medical or medical personnel to attempt to limit admissions, length of stay, and use of said insurance. Boy,

talk about conflict of interest. Unfortunately the next logical step for private insurance industry would be to follow in the footsteps of Medicare and set up their own DRG system. Following that they would love to tie in hospital charges and doctors fees in one lump sum and let those two factions haggle over who gets what.

Sadly, all of the above is being thrust upon us, not because medical care has been so shoddy, but because it has been so superior in this our free enterprise system. Medical technology and progress have certainly kept pace with advances made in other fields. But "high tech" and advances are never cheaper and are generally better than the preceding "generic" medicine.

It's a problem of whose ox is being gored! Let NASA launch a multimillion dollar Mariner-9 satellite and send back stunning photographs of Saturn and the whole country cheers. But let a physician admit a patient to intensive care and administer an intravenous antibiotic for several days at a cost of several thousand dollars and cries of rip-off, fraud and price gouging fill the air. Let industry have a cost overrun on a nuclear aircraft carrier and you can well bet that bill will be paid. But let a patient's stay exceed the suitable DRG and the hospital has to take the loss. Some ox. Some gore.

Not too long ago I was watching on cable T.V. a congressional hearing whereby a president of a major pharmaceutical company was being chastised by a member of the United States Congress. The point in issue was the cost of a drug used to treat AIDS. The representative thought the price was too high. Yet the very same representative took an increase in his own government paycheck without even having the courage of his convictions to debate or to vote on the increase. The pay increase passed without any member of Congress taking a stand or a vote. Some ox. Some gore.

All of the above is not meant to be a diatribe against my Country or even my government. It is an attempt to show other sides of the problems we as physicians face in getting people well. The majority of doctors whom I know are diligent, hard working and caring people who strive for good results for their patients. But in total medical care there are forces that are beyond the control of physicians and these forces also add to the cost of this care. The pendulum has swung far, in fact so far it is about to do "a 360" and kick us in the rear.

**Milton F. Miller, M.D.**



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To find out about the benefits of serving with a nearby Army Reserve unit, we recommend you call our Army Medical Personnel Counselor.

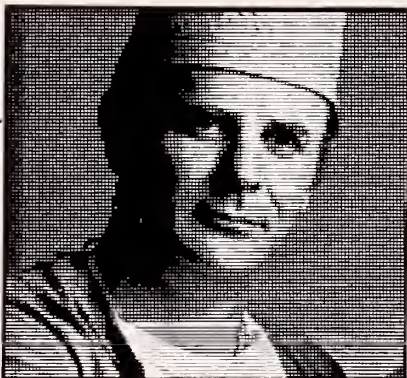
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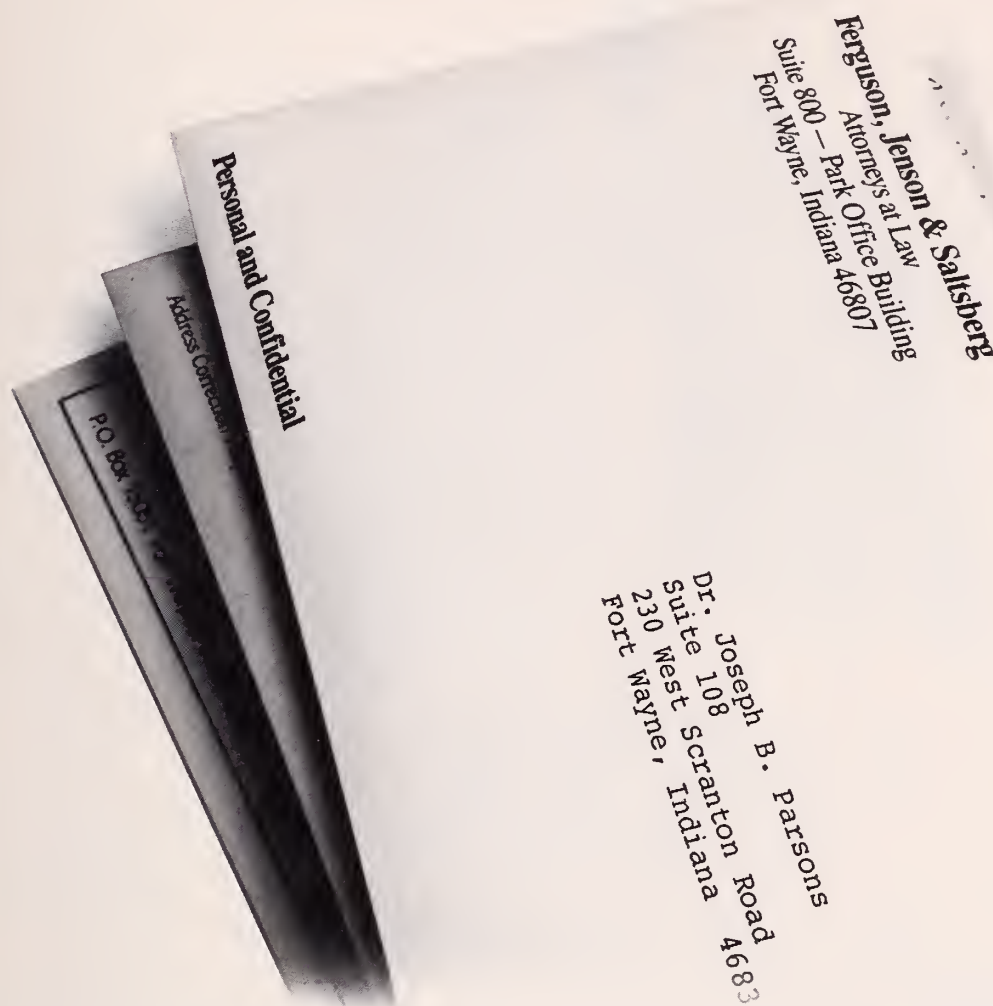
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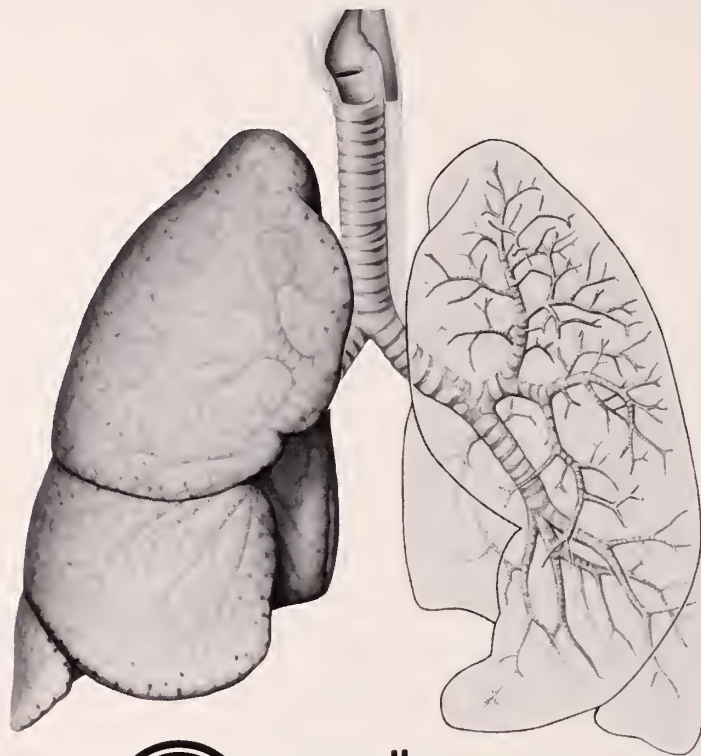
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**Note:** Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

## **Ceclor<sup>®</sup> (cefactor)**

**Summary.** Consult the package literature for prescribing information.

**Indications:** Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A  $\beta$ -hemolytic streptococci).

**Contraindication:**  
Known allergy to cephalosporins.

**Warnings:**  
CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

## **Precautions:**

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

**Adverse Reactions:** (percentage of patients)  
Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness,

insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

## **Abnormalities in laboratory results of uncertain etiology**

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (glucose enzymatic test strip, Lilly).

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## **Clinical Electrocardiography A Primary Care Approach**

*Ken Grauer, MD*

*R. Whitney Curry Jr., MD*

*Medical Economics Books, Oradell, New Jersey 07649. 1987*

Clinical Electrocardiography is a new publication directed to the audience of primary care physicians. Their needs for a primer in cardiology and specifically in interpreting the ECG, will probably be met with this book. Divisions are constructed in such a way to make selective reading possible, given the variable backgrounds of the readers. Part One discusses basic principals - the conduction system, PR interval, QRS complex, ST segment, *etc* - followed by a rather simplistic "Systematic Approach to ECG Interpretation." Rate and rhythm, axis and other parts are discussed in pedantic and certainly explicit terms.

This introduction being completed, clinical applications of the ECG such

as intraventricular conduction delays, myocardial infarction, chamber enlargement, and the ST segment assessment are described.

Part Three is basically a review with exercises in ECG interpretation. Interesting examples of the ECG in metabolic disturbances, in healthy asymptomatic patients and in cardiomegaly excite the reader's curiosity. Finally an appendix provides abbreviations, a reference guide and a good index. The bibliography is very brief but supplies the classic textbooks of ECG interpretation and technical information.

Throughout the book "problems" are offered to the reader for solution and each is followed by an "answer," a Socratic approach which I found very stimulating. Nevertheless the reader who is looking for quick reference or review might find all these questions disruptive.

Illustrations are not of good quality, some areas fuzzy, other areas having thick lines where fine ones would be more effective.

Primary care physicians will find this book useful if it is their first one on the ECG and to review, perhaps because the authors are primary care physician educators.

## **The Good News About Depression Cures and treatments in the new age of psychiatry**

*Mark S. Gold, MD*

*Villard Books, New York. 1987*

Reviewing this book was like going to a revival - with the enthusiasm of an evangelist and the cause of a religion. What audience will enjoy this book might consist of victims of depression, magazine editors, self-help groups and perhaps some of the mental health community. Certainly the classic psychoanalyst will not welcome this because it basically has nothing to interdigitate with this approach.

Essentially two basic announcements are made repeatedly. Depression frequently, though certainly not always, has some medical pathophysiologic cause amenable to intervention. Secondly the advent of psychopharmacology with its many new weapons arms the psychiatrist more heavily than his predecessor. Recurrent references are made to these two themes.

In some detail the medical work-up is described, but again the author chooses to include dramatic examples of omissions or failure to diagnose, making the evaluation of the psychiatric patient seem too simplistic. Unquestionably an exhaustive medical evaluation is necessary and most nonpsychiatric physicians would tend to initially do some of this review. In other words not every depressed patient escapes medical investigation. Laboratories are now well equipped to do drug screening and levels to have sophisticated testing materials for our access. Dr. Gold apparently makes significant use of the laboratory, especially at his research perspective. Cost is a factor for the mental health agencies and the average depressed patient, making such evaluations a burden.

Nevertheless the author's points are well taken. Readers will find inserted small discussions of the paucity of psychiatrists, the making of a psychiatrist, incomes, malpractice predicaments, *etc*, all of which give the book a hodge-podge quality. Sometimes reading made me want to check which issue of *Time* or *Vogue* was in my hand.

I suppose the readership of this book will find some camaraderie with whatever part of this issue is significant to them. *Scientific* it is not, entertaining perhaps, dramatic for sure - a narrative of this reader's feelings.

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**Stephen Z. Smith, M.D.**

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**WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

**Precautions:** The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin (ACTH)). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

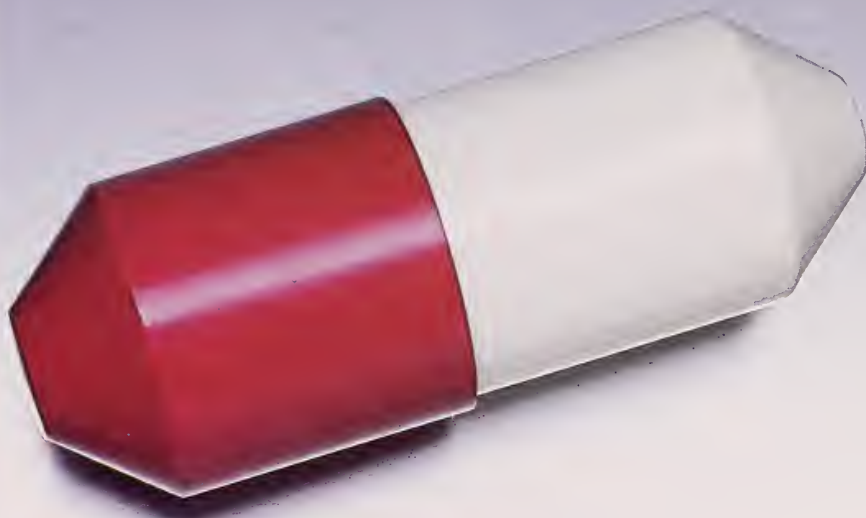
**Supplied:** 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BRS-DZ:L42

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# Geriatric Aspects of Psychopharmacology

## (A Two Part Series)

### Part B

STEVEN LIPPMANN, M.D.

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*The increasingly large percentage of older people in our society necessitates specific attention to geriatric medicine and clinical psychopharmacology. As patients, the elderly often require treatment for anxiety, depression, psychosis and memory impairment. Prescribing medicines in geriatrics requires careful consideration to drug indication, dosage, side-effects and follow-up. Initially, always administer drugs in lower quantities and escalate doses more gradually with close observation of such parameters as sedation, efficacy, and adverse consequences. Side-effects and dangers of polypharmacy are enhanced in this population, especially anticipate anti-cholinergic manifestations, cardiotoxicity, orthostatic hypotension and their inherent risks.*

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*Steven Lippmann, M.D., Professor,  
Department of Psychiatry and Behavioral Sciences, University of Louisville  
School of Medicine.*

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*Mailing Address: Humana Hospital  
University, 5-East, 530 South Jackson  
Street, Louisville, KY 40202.*

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*This article is submitted for publication in compliance with a request from  
John C. Wright, M.D. and is for the  
JKMA geriatric series.*

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**T**his discussion is the second part in a series of two papers on the geriatric aspects of psychopharmacology. Part A (May *JKMA*) reviewed general prescribing information for geriatric patients with a focus on lithium and anti-depressants. This section considers anxiolytics, neuroleptics (antipsychotic drugs) and the pharmacotherapy of dementia. The discussion is limited to issues relevant only to prescribing in geriatric practice, therefore seek other routine pharmaceutical information and precautions from selected sources.<sup>1-5</sup>

#### Anxiolytics

Barbiturates are an effective, yet inexpensive class of medicines which are beset with dramatic disadvantages.<sup>3-6</sup> Addictive potential, rapid development of tolerance, dangerous drug withdrawal, respiratory depression and lethality in overdose have made these medications essentially obsolete. In geriatric practice, the additional complications of paradoxical excitement, inducing confusing and rebound insomnia make barbiturates almost contraindicated except for anesthesia or phenobarbital as an adjunctive anticonvulsant. Lastly, in long-term treatments,



even in non-abuse circumstances, it is difficult to get patient cooperation at discontinuing these agents.

There are other sedatives. Meproamate, ethchlorvynol, glutethimide and methypylon, *etc* all share the negative aspects of barbiturates, and they often are more costly with virtually no advantage. This sedative group is not recommended. Chloral hydrate is an old, generally safe hypnotic, but it too is prone to causing confusion, abuse, *etc*, and is also a gastric irritant with little other advantage. Antihistamines, especially diphenhydramine, are commonly employed and are sedating and safe, but they exhibit atropine-like effects which are sometimes poorly tolerated.

Benzodiazepines, on the other hand, are a dramatically safer group of drugs with significantly lower risk of side-effects.<sup>3-6</sup> Over-sedation with confusion and medication abuse are the main clinically relevant problems. Patients "like" benzodiazepines and are often reluctant to stop using them; therefore, these medicines must be responsibly prescribed and closely supervised. Never start or refill them without satisfactory indications. People easily become dependent on benzodiazepines, and it is not rare to discover patients over-using them while seeing several physicians simply to secure a steady over-supply. Prolonged consumption is common with 70% of long-term users being over age 50. Daily administration can cause attenuation of benefits and discontinuance then results in rebound insomnia, therefore intermittent applications are strongly urged. Frequent use gradually may result in drug accumulations over time and development of progressive, chronic over-sedation. Lower dose, intermittent therapy prevents these complications.

Despite their significant safety advantages, geriatric applications require caution to reduce toxicity.<sup>6</sup> The drug half-lives can be very markedly prolonged in this population. Several benzodiazepines undergo oxidative hepatic metabolism which is reduced with age and results in longer parent compound or metabolite half lives and greater risk for accumulation in elderly subjects (*eg*, chlordiazepoxide, chlorazepate, diazepam, flurazepam, *etc*). Agents not oxidatively metabolized are somewhat less subject to this age-related risk (*eg*, oxazepam and lorazepam), but they may be more prone to induce dependency.

Brain sensitivity to these drugs is heightened by age. Benzodiazepines are recommended to be prescribed in doses lower than for younger patients. Anxiety and insomnia are the primary indications, but alprazolam is also recommended for depression. Avoid most complications by tight indications, close prescription and refill control and by intermittent administrations. Chronic use necessitates slow, gradual withdrawal to avoid increased anxiety or even withdrawal illness.

Buspirone is a newer, chemically different, and very promising anxiolytic. Buspirone is effective only in continued, consistent daily applications and is not useful on an episodic or a "prn" basis. This drug is reportedly free of addictive potential and its effects are not additive to co-administrations with alcohol or other sedatives. Buspirone should provide a "calm," without physical dependency.

### Neuroleptics

Neuroleptics are prescribed for symptomatic reduction of psychosis. They are indicated non-specifically

for their antipsychotic properties, regardless of the etiology of the psychosis: dementia, depression, schizophrenia, mania and if needed, for behavioral control in an agitated, disturbed delirium. Efficacy is observed in psychosis, of course, and also for anxiety, insomnia, agitation, impulsivity and destructive or combative behavior, if associated with a psychosis. Neuroleptics are not often recommended for these phenomena when **not** a part of a psychotic disorder.

Specific neuroleptics are selected for an individual patient based on side-effect profiles.<sup>2-4</sup> The low potency group (*eg*, chlorpromazine or thioridazine) have sedation, anticholinergic (especially thioridazine) effects and orthostatic hypotension (especially chlorpromazine) as the primary clinical difficulties. The high potency types (*eg*, haloperidol, thiothixene and fluphenazine) result in parkinsonianism (*eg*, rigidity or tremor). Between these extremes are numerous intermediate choices (*eg*, loxapine, trifluoperazine, *etc*) with adverse consequences that are intermediate in these side-effect patterns. Selection is personalized, as each of these effects can be especially problematic amongst elderly people. Thioridazine, for example, might be ideal for a highly agitated, psychotic patient with parkinsonian tendencies; however, it would be a poor choice for a quietly psychotic, demented man with a grossly enlarged prostate and partial urinary stasis.

Long-term neuroleptic exposures can cause Tardive Dyskinesia, especially in predisposed populations, *ie*, the elderly, females, persons with cerebral pathology and dental problems including edentulism. These phenomena are common in geriatric practices. Which drug carries the

## NOTES ON AGING

greatest risk for causing Tardive Dyskinesia is not clearly established, but because of this danger and other side-effects, neuroleptics are always recommended at the lowest effective dose and for the shortest time exposure compatible with the patient's clinical status. Unfortunately, many treatment courses are protracted for years or even a lifetime. Initial dose recommendations are for quantities well below the usual, for example with haloperidol, try one-half or 1 mg once or twice a day, or thioridazine in 10 or 25 mg increments. Subsequent administrations are set by experientially observed clinical parameters; therefore, some subjects may do well on low doses while others require larger doses on a titrated basis.

### Combined Preparations

Several combination drug preparations are available. They contain the anti-depressant amitriptyline with either the neuroleptic, perphenazine or the benzodiazepine, chlor-diazepoxide. These medicines generally are of limited benefit, with a polypharmacy of diminished dosage flexibility, and often they are contraindicated. Those with the neuroleptic (*ie*, Triavil and Etrafon) are only indicated in overt psychosis with depression and not for routine depressions. Inappropriate use exposes patients to neuroleptic side-effects, without other advantages. The combination with the anxiolytic (*ie*, Limbitrol) is hardly ever needed. In geriatrics the additional sedation is a disadvantage, and often precludes the administration of therapeutic antidepressant dosage. Combined psychopharmacology agents are rarely recommended.<sup>6</sup>

### Treating Memory Impairment

What about the memory impaired

#### Guidelines for Safe Psychopharmacotherapy in Geriatrics

1. Perform an appropriate diagnostic work-up
2. Select specific treatments with *individualized* indications
3. Discontinue as many medicines as possible
4. Provide appropriate holistic therapy for other medical conditions
5. Ensure adequate hydration and nutrition
6. Prescribe so as to avoid drug interactions
7. Provide information and warnings about side-effects and their management; also how to contact the physician about problems
8. Always start with much *lower* dosages
9. Escalate dosage more slowly
10. Set easy-to-follow drug administration schedules
11. Anticipate side-effects and monitor closely
12. At prescription refill time, assure adequacy, need and efficacy of *each* medicine *before* continuing the therapy
13. Pay attention to the special risk factors of the elderly; e.g., bladder obstruction, cardiac disease, risk for falls, etc.

patient? Are there pharmacotherapies which enhance lost cognitive skills? This question is only answerable with detailed information on a specific patient after the dementia diagnosis is known.<sup>7</sup> A thorough workup of all persons with diminished mental capacity is mandatory. The same applies to delirium cases where treatment is directed at the offending or etiologic pathophysiology (eg, fluid restriction for hyponatremic delirium). This discussion is limited to consideration of drug treatment in dementias.

Pharmacotherapy plays an infrequent but critically important role in treatable dementias as caused by hypothyroidism (*ie*, thyroid replacement), Pernicious Anemia (*ie*, cyanocobalamine) or tertiary Lues (*ie*, penicillin), *etc.*<sup>7</sup> In dementias such as the multi-infarct type, drugs may be useful for control of hypertension or as in antiplatelet therapies. Some dementia cases require other interventions, such as surgery for normal pressure hydrocephalus or a subdural hematoma. In undiagnosable cases, Alzheimer's, Pick's or brain injury cases, for example, medicines have a more limited role. For demented patients with depression, psychosis

or agitation, *etc.*, provide treatment in the routine manner. Also, there are medicinal approaches to cognitive disturbances.<sup>7-9</sup>

Ergot drugs which function as metabolic enhancers are somewhat effective in a small number of cases.<sup>7-9</sup> Hydergine is the best known brand. Prescribe it as follows: 1 mg po tid for two months, then meet with patient and family to assess benefit. If no improvement is noted, escalate dose to 2 mg po tid and again re-evaluate in another two months. Side-effects are negligible, but this is the medicine most likely to be effective in dementia. Keep expectations low but maintain hope. At times this preparation is helpful, and when not, there are other pharmacotherapies, albeit with a lesser chance to be effective in cognitive skill restoration. Before beginning a trial with another medicine to improve memory, first give a drug-free wash-out period. Families sometimes retrospectively notice benefits from Hydergine, **after** stopping the drug. Reconvene the family at each step in the therapy for feed-back on efficacy of each approach.

Vasodilators had been the primary treatment of diminished mental capacity, but efficacy is limited.<sup>7-9</sup> Only



## NOTES ON AGING

a small group of people benefit from them, and a significant group may even be made worse. Deterioration is attributed to vasodilation in normal vascular beds, even possibly inducing hypotension, while abnormal cerebrovascular vessels are unaffected. Arterial narrowing is probably not the direct cause of dementia; more likely dysfunction follows infarcts. Cautiously prescribe these drugs under close observation. Cyclandelate is the most widely accepted within this category. A trial period of one to two months is reasonable in selected cases when Hydergine is not helpful. Niacin or other vasodilators (eg, papaverine) may be given a trial therapy, if appropriate.

There is a great interest in prescribing brain neurotransmitter precursors as a means of improving memory.<sup>7-9</sup> Acetylcholine receives the most attention, yet dopamine and others are considered. This method may be worth trying, but unfortunately, results usually are disappointing: selecting ways to enhance acetylcholine is the most reasonable method. Anticipate results not uniformly good in frequency or quality. Lecithin, purchased as a health food, is the best choice. Other choline agonists (choline, deanol, physostigmine, etc) are less attractive. Lecithin is suggested in 20-100 gm daily di-

vided doses on a two month trial basis.

Multiple vitamins frequently are empirically provided to demented patients. This might aid nutrition, but it will not restore memory except in acute vitamin deficiencies. Parenteral vitamin B-12 is only advised in cases of documented Pernicious Anemia, the same applies to folate supplementation. Low dose aspirin is sometimes prescribed without proven need of antiplatelet effects, but such therapy (10 grains daily) is rarely effective and prolongs bleeding time. More potent anticoagulants (eg, dicumerol) possess greater risk, and memory impaired patients should never self-administer these drugs without supervision. Other than aspirin, anticoagulants are not recommended unless specific anticoagulation needs outweigh dangers of not providing them.

Other possibilities include a variety of research grade, experimental treatments which are usually applied only under a protocol.<sup>5</sup> No other readily available therapies demonstrate reliable improvement in memory, but investigations are active. Provide guidance to families to avoid fraudulent, costly "cures" which only serve to increase disappointment. Adjunctive therapies for demented persons with depression

or psychosis can be enormously helpful at reducing dysfunction and are warranted even though memory is not aided. In selected cases of otherwise untreatable dementias, refer patients to research centers when appropriate.

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### Acknowledgment

*I extend my greatest thanks to Mary Stikes, Dollie Bottorff and Robert Freeman for excellent clerical services and to Virginia Keeney, M.D. for stimulating me towards academic aspirations.*

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**References** 1. Lippmann S: Drug therapy for depression in the elderly. *Postgraduate Medicine* 73:159-173, 1983. 2. Crook T, Cohen G (eds): *Physicians' Handbook on Psychotherapeutic Drug Use in the Aged*. New Canaan, Mark Powley Associates, Inc., 1981. 3. Poe WD, Holloway DA: *Drugs and the Aged*. New York, McGraw Hill Inc., 1980. 4. Nandy K (ed): *Geriatric Psychopharmacology*. New York, Elsevier/North-Holland, 1979. 5. Burch EA: Psychopharmacological variables in the elderly, in *Clinical Perspectives on Aging*, Jenike MA (ed). Wyeth Laboratories, 1985. 6. Lippmann S: Standard and newly-available antidepressant drug treatments. *JKMA* 81:687-692, 1983. 7. Lippmann S: The treatment of dementia. *Resident and Staff Physician* 28:86-96, 1982. 8. Goodnick P, Gershon S: Chemotherapy of cognitive disorders in geriatric subjects. *J Clin Psychiatry* 45:196-209, 1984. 9. Jenike MA: Alzheimer's disease: diagnosis, treatment and management, in *Clinical Perspectives on Aging*, Wyeth Laboratories, 1985.

# ASSOCIATION



Volunteers from KMA and the Fayette County Medical Society participated in the KET Fund for Excellence on March 16, helping raise more than \$22,000 in programming funds.



KMA President Richard F. Hench, M.D., Lexington, helped answer phones during the KET Fund for Excellence.

## *KMA Resident Council Elects 1987 Officers*

**Warren Cox, IV, M.D.**, Louisville, was elected President of the KMA Resident Physicians Section by the Governing Council at its meeting on March 18 in Louisville. Doctor Cox succeeds R. Mont Wood, M.D., Madisonville, who will be starting private practice in July 1987.

Other officers elected for the coming year are: President-Elect, **Forrest Hanke, M.D.**, Madisonville; Chairperson, Thomas Horton, M.D., Lexington; AMA Delegate, Kenny Manion, M.D., Madisonville; AMA Alternate Delegate, **Vaughn Payne, M.D.**, Louisville; KMA Delegate, **Anne Winterland, M.D.**, Louisville; KMA Alternate Delegate, **Michael Wilson, M.D.**, Lexington, and Secretary/Treasurer, **James Engleman, M.D.**, Edgewood.

## *Members*

**Morton L. Kasdan, M.D.**, Louisville, has received the 1987 Kentucky Physician of the Year Award from the Kentucky Committee on Employment of the Handicapped. The award is given annually to a Kentucky physician who has made an outstanding contribution in enabling individuals to belong to the work force. Doctor Kasdan, a plastic surgeon, was honored for his work in hand and limb surgery. He is a 1963 graduate of the University of Louisville and has been a member of KMA since 1963.



Dr. Cole



Dr. Kasdan

**Norman M. Cole, M.D.**, Louisville, was named President of the American Society for Aesthetic Plastic Surgery, Inc., during its 20th anniversary meeting at the Century Plaza Hotel. Doctor Cole earned his medical degree from Loma Linda Hospital in California and had residence in plastic surgery at Duke University.

**James W. Bard, M.D.**, President of the Lexington Clinic, was elected President of the Noah Worcester Dermatological Society at their annual meeting in Rancho Mirage, California. Doctor Bard is a 1958 graduate of the Medical College of Wisconsin.



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**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Due to isolated reports of exacerbation, use with caution in patients with porphyria.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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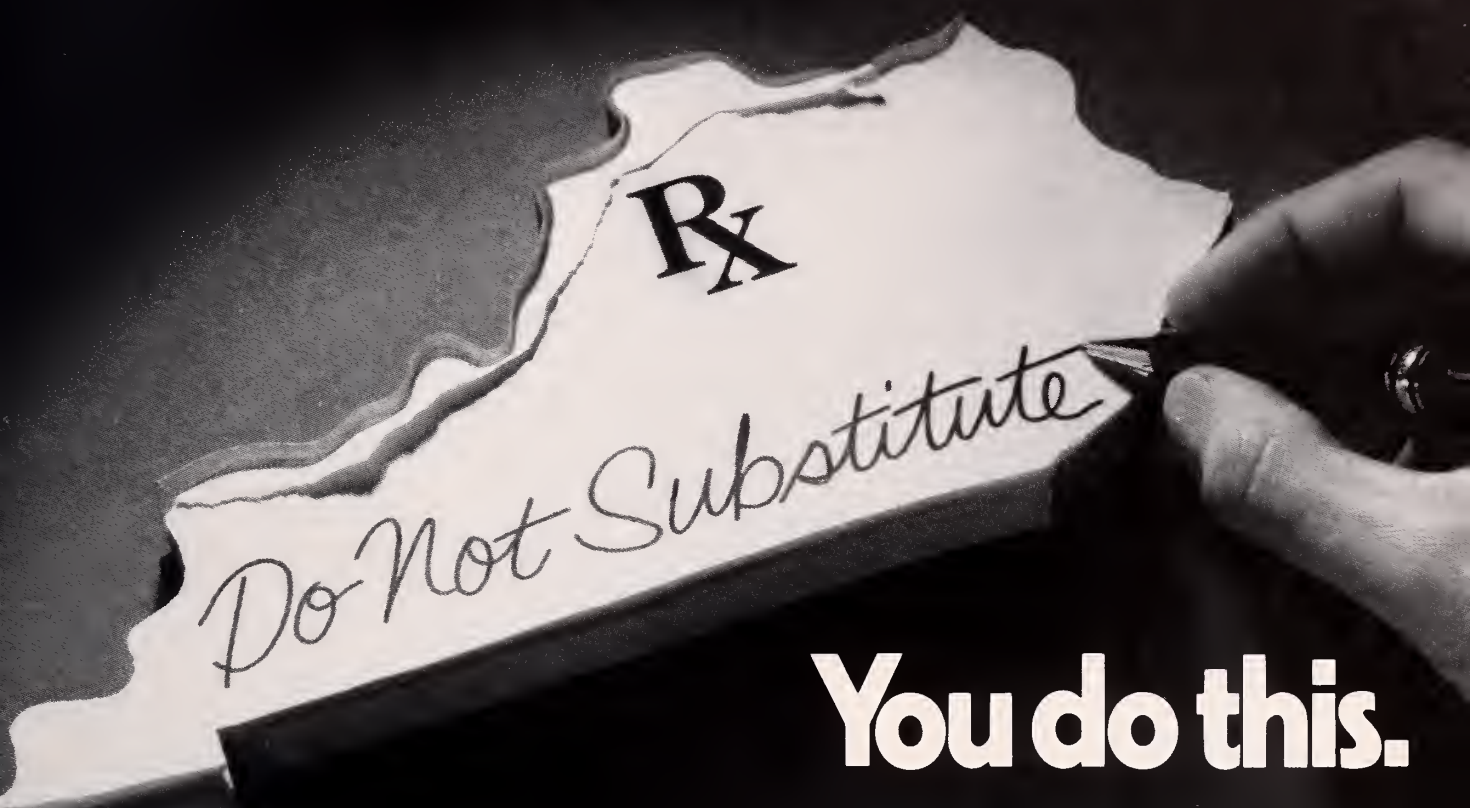
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Wally O. Montgomery, M.D., Paducah, Chairman of the ad hoc Committee on PLL.

The KMA Executive Committee of the Ad Hoc Committee on **Professional Liability Insurance** met on April 2. Wenz-Neely and The Preston Group, two public relations firms hired by KMA, updated the Committee on their activities. A telephone survey of 596 adults has been completed by Hamilton, Frederick and Schneiders of Washington, D.C., and a summary of these results was presented to the Committee. The survey indicates that the public is aware of

the crisis and supports reform in the legislature.

The Committee also reviewed a survey of family physicians and OB/GYN's who deliver, which was undertaken by KMA. That survey became an exclusive on the front page of the Sunday, April 27, issue of the *Courier-Journal* and is printed in this issue on page 349.

The KMA Committee to Investigate Changing Trends in Medicine met on Wednesday, April 1, 1987, and devoted the majority of its meeting to a discussion of Resolution Q, which asked KMA to examine the problems created by alternate payment systems. The Committee developed recommendations to better inform physicians and patients about alternate payment systems in an effort to make both groups as informed as possible in terms of choosing a health plan in which to participate.

## Committees

On March 24 the KMA **Cancer Committee** met at the Headquarters Office. The Committee reviewed revisions to the Breast Cancer Brochure. The Brochure, which is required by law, charges the McDowell Cancer Network and the James Graham Brown Cancer Center with the responsibility for jointly developing a written summary of alternatives for the treatment of breast cancer. The KMA Cancer Committee, various specialty groups, and other surgical societies have all had an opportunity for input.

The Committee also recommended that all Kentucky physicians be aware May is Breast Cancer Awareness Month and work with the American Cancer Society; Kentucky Community Cancer Program; Kentucky Chapter, American College of Radiology; and Kentucky Federation of Women's Clubs to notify physicians of this program.



KMA Trends Committee. Chairman Nelson B. Rue, M.D., Bowling Green, at head of table



KMA Cancer Committee. Chairman P. Raphael Caffrey, M.D., Lexington at head of table.



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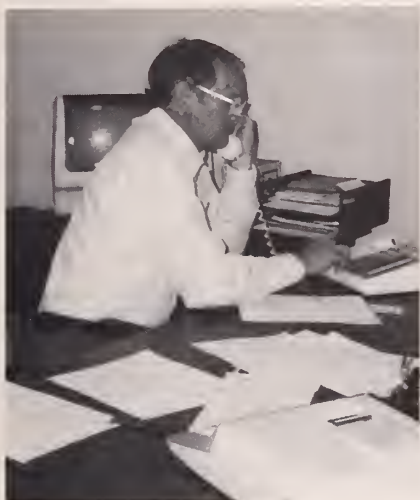
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## **KMA Phonathon**

Members of KMA's Executive Committee met on the evening of April 1 to call KMA members who had not renewed their membership for 1987. A total of 83 personal contacts was made that evening, with 75% of those called indicating they planned to renew. Participants in the third annual Phonathon were: Richard Hench, M.D.; Donald C. Barton, M.D.; Nelson B. Rue, M.D.; Thomas R. Watson, M.D.; Bob M. DeWeese, M.D.; William B. Monnig, M.D., and Harold D. Haller, M.D.



**Bob M. DeWeese, MD**  
5th District Trustee



**Thomas R. Watson, MD**  
KMA Vice President



**Donald C. Barton, MD**  
KMA President Elect



**William B. Monnig, MD**  
8th District Trustee



**Harold D. Haller, MD**  
Membership Committee Chairman



**Nelson B. Rue, MD**  
KMA Board Chairman



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## Deaths

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*Tim Lee Carter, M.D.  
Tompkinsville  
1910-1987*

Former U.S. Rep. Tim Lee Carter, M.D., died March 27, at T.J. Samson Community Hospital in Glasgow. Doctor Carter served in Congress from 1964 to 1980 as a Republican from the Fifth District. He was a general practitioner and a 1937 graduate of the University of Tennessee College of Medicine. Doctor Carter was a representative of one of the nation's poorest districts and strongly supported federal programs for vocational schools, hospitals, libraries and airports. He said passage of a law that provided preventive medical care for children of poor families was his most important legislative achievement. Doctor Carter had been a member of KMA since 1940 and was one of organized medicine's staunchest supporters.

## CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. \$5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

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**Otolaryngology:** Bluegrass Region Central Kentucky Otolaryngologist BC/BE to associate with multispecialty group. Partnership available in our restored antebellum office building would provide interest in existing clinical laboratory, pharmacy, and planned radiology. Area services 4 county population of 120,000 and has only part-time ENT coverage.

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# Survey of Kentucky Obstetric Practice

## Executive Summary

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A survey was conducted in November 1986, among members of the Kentucky Medical Association who listed their specialties as family practice or obstetrics/gynecology. The response rate was 42%. The majority of those who had practiced obstetrics during the previous eight years were obstetricians/gynecologists, and this proportion is increasing through attrition. One third of the obstetricians/gynecologists had reduced or quit obstetrics during the eight years, but four-fifths of family practitioners had either reduced their obstetrics practice or left it altogether. Still more physicians are planning to quit. Obtaining obstetric care may become a severe problem in midwestern Kentucky where only 18% of those who had once practiced obstetrics plan to continue.

Liability problems were reported by 70% of the physicians as the reason for quitting obstetrics. Most physicians carry at least \$1 million in coverage, with some reporting coverage up to \$10 million. Insurance coverage cannot be viewed as an optional expense, as about one third of the physicians have been sued; further, most physicians report insurance is required by their hospitals as a prerequisite to practicing obstetrics. The Kentucky Medical Insurance Company is the most frequent insurer for physicians and is used more frequently by obstetricians/gynecologists than by family practitioners.

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*Summary Results Prepared by  
Gordon Scott Bonham, Ph.D.  
Urban Studies Center  
College of Urban  
and Public Affairs  
University of Louisville*

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### Background

Professional liability is a major issue among physicians. Four out of five Kentucky physicians reported that their concerns about it had affected the way they practice medicine (Bonham, 1986). For some physicians, the only effect was to require a few additional tests or put increased emphasis on recordkeeping. For others, the liability crisis caused them to restrict, change, or quit their practice. While liability issues affect most physicians, for those who practice obstetrics (mostly obstetricians/gynecologists and family practitioners), the concern has reached crisis proportions.

The Kentucky Medical Association, in June 1986, had 648 members who listed family practice as their specialty and 295 members who listed obstetrics/gynecology as their specialty. These members were sent a survey about the "obstetrics liability problem and its potential for crisis in our state" and were asked to complete the questionnaire if they had practiced obstetrics during the past eight years. This report summarizes their responses to that survey.

### Data and Methods

In November 1986, 943 physicians specializing in family practice and obstetrics/gynecology were mailed questionnaires. Responses were received from 395 physicians, for a 42% response rate. The instructions specified that the questionnaire should be returned only if the physician had practiced obstetrics within the past eight years, so some of those who did not respond were physicians that had not practiced obstetrics. About six out of 10 (61%) obstetricians/

TABLE 1 PHYSICIANS BY CURRENT LEVEL OF OBSTETRICAL PRACTICE					
Physician Characteristics	Same Level Obstetrics	Reduced Obstetrics	Left Obstetrics	Total	Number
Total	45	19	36	100	(329)
Type of Practice					
Family	21	17	62	100	(147)
Ob/gyn	66	22	12	100	(175)
Region					
Southeast	53	13	33	100	(45)
Northeast	38	20	42	100	(90)
North Central	55	23	22	100	(82)
Midwest	37	25	39	100	(57)
West	52	15	33	100	(46)

TABLE 2 PERCENT OF PHYSICIANS BY ANNUAL INSURANCE PREMIUMS					
Annual Premium	Same Level Obstetric	Consider Quitting	Reduced Obstetric	Quit	Total
Under \$10,000	14	12	29	83	37
\$10,000-19,000	51	33	37	11	33
\$20,000 and over	36	55	35	7	29
Total	100	100	100	100	100
(Number)	(93)	(33)	(52)	(76)	(254)

gynecologists responded to the survey, and about three out of 10 (29%) family practitioners.

Any respondents who had not practiced obstetrics during the past eight years were excluded from this analysis. Unless otherwise specified, all the findings in this analysis apply to the 330 responding physicians who had practiced obstetrics at some time between 1978 and 1986.

Responses of individual physicians were keyed into machine-readable form. Questions with no recorded response were keyed as missing data and the physician's record was excluded from the analysis of such questions. Numbers are shown in the tables to indicate the number of valid responses upon which percentages are calculated. Stepwise multiple regression is used to assess the independent effects of multiple factors, many of which are coded as

dichotomous variables. The regions used in this analysis are shown in Appendix Figure 1.

### Findings

#### Obstetrics Practice

The practice of obstetrics now is largely in the hands of obstetricians/gynecologists. While there were half as many obstetricians/gynecologists as family practitioners in Kentucky, the majority (54%) of the physicians who had practiced obstetrics during the past eight years were obstetricians/gynecologists. The proportion of physicians returning questionnaires indicates that at least three out of five Kentucky obstetricians/gynecologists are practicing obstetrics. One out of four family practitioners are known to have practiced obstetrics during the eight years. The relative involvement of the two specialties in obstetrics varied

## ASSOCIATION

greatly by region. Two thirds (64%) of the physicians practicing obstetrics in the Midwest Region of Kentucky had family practice specialties, whereas only one fourth (24%) of those in the North Central Region, dominated by Louisville, had family practice specialties. Obstetric practices were more evenly split between family practitioners and obstetricians/gynecologists in the Northeast Region (54% and 46%), the Southeast Region (52% and 48%) and the Western Region (41% and 59%).

Many Kentucky physicians have been reducing or eliminating the obstetrical portion of their practices. One third of the physicians who had practiced obstetrics at some time between 1978 and 1986 had quit obstetrics by 1986. (See Table 1). An additional one out of five physicians had reduced their obstetrics practice. Fewer than half of the physicians either maintained or increased their obstetrics practice.

The decline in obstetrics was especially great among family practitioners. Three out of five family practitioners had discontinued their obstetrics practice by 1986, and another one out of five had reduced their practice. In contrast, one out of eight obstetricians/gynecologists had left their obstetrics practice by 1986, and one out of five had reduced their practice. The discontinuation of obstetrics was most frequent in the Northeast Region and least frequent in the North Central Region of the Commonwealth. Family practitioners still maintaining obstetrics practices had been practicing for relatively short periods of time (median of six years). Obste-

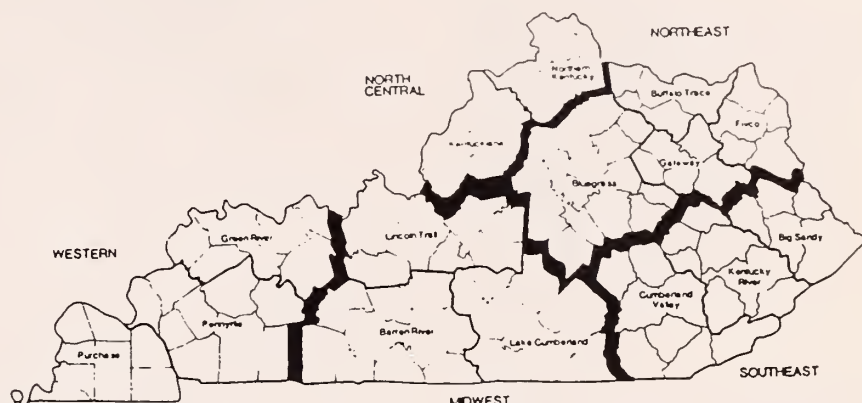


Figure 1: Regions of Kentucky

tricians/gynecologists maintaining obstetrics practice had been practicing about twice as long (median of 10 years).

The decline in obstetrics practice may not be over. One out of eight (12%) physicians practicing obstetrics in 1986 said they might discontinue this part of their practice in the near future. This was especially true of those who had already reduced their obstetrical practice: over half (57%) had definite plans to end their practice in the immediate future and one-eighth (14%) said they were considering such a measure. As a group, less than one third (32%) of Kentucky physicians who had practiced obstetrics in the past were planning to continue their obstetrics practice at their current levels. (See Figure 1). This was much lower in the Midwest Region where fewer than one in five (18%) planned to continue in obstetrics.

The survey was conducted to collect information about the liability problems in obstetrics. Over two-thirds (70%) of the physicians

who had left their obstetrics practice between 1978 and 1986 mentioned problems related to liability in one way or another. Liability problems were less frequently mentioned as a reason for reducing obstetrical practice, but were still mentioned by about one third (38%) of those who had chosen to continue practicing obstetrics but to reduce the patient load. Liability issues were mentioned by about seven out of eight (86%) of those who were planning to quit obstetrics altogether in the future.

### Liability Insurance

Liability insurance coverage is a major expense for physicians. The most frequently reported level of coverage for physicians who do or did practice obstetrics was \$1 million. Four out of 10 (40%) reported coverage of \$1 million; about two out of 10 (15%) reported carrying less than that amount, with the rest (44%) reporting coverage amounts up to \$10 million. The amount of coverage carried is clearly related to current obstetri-



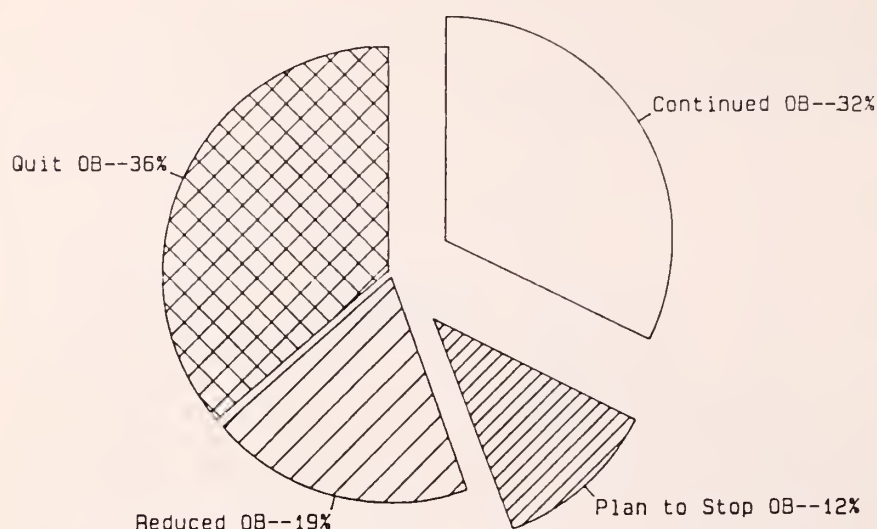


Figure 2: Obstetrics practice of Kentucky physicians

cal practice. Coverage at \$3 million or more was carried by 30% of physicians currently practicing obstetrics, compared to only 13% of those who had quit obstetrics by 1986.

Insurance premiums varied greatly among the physicians who responded to the survey. Premiums were highly related to obstetrics practice. No family practitioners reported premiums as high as \$20,000 per year. In contrast, over half (51%) of obstetricians/gynecologists who practiced obstetrics reported paying \$20,000 or more annually. In relationship to current practice, physicians currently practicing obstetrics were six times as likely to pay \$20,000 or more in annual premiums than physicians who had discontinued their obstetrical practice. (See Table 2.) Those physicians who plan to quit obstetrics in the future have the highest insurance premiums—over half report paying \$20,000 or more a year.

On other matters related to lia-

bility insurance, three-fourths of the physicians (76%) reported that they were required by their hospital to maintain specified limits of insurance coverage in order to maintain an obstetrics practice in the hospital.

Kentucky Medical Insurance Company (KMIC) is the insurer for over half (57%) of the physicians who have practiced obstetrics at any time during the previous eight years. The next most frequently mentioned insurer was Medical Protective, carried by about one-fourth (23%) of the physicians. The specialties of the physicians were significantly related to their choice of insurers. Family practitioners were about evenly divided between KMIC and Medical Protective, with about one third insured by each. KMIC was overwhelmingly chosen as their insurer by three-fourths of the obstetricians/gynecologists.

Liability insurance provides protection from the economic consequences of a malpractice suit.

Three out of 10 (30%) Kentucky physicians who practiced obstetrics within the past eight years have been sued, which is close to the 35% level of all Kentucky physicians who reported having been sued in an earlier survey (Bonham, 1986). Only 6% of physicians who practiced obstetrics had actually gone to trial in a lawsuit. Among all Kentucky physicians who were sued, about one-fourth of the lawsuits resulted in a settlement to the patient, one-third resulted in acquittal of the physician or dismissal of the case, a few were dropped by the plaintiff, and the remainder were unresolved. Being named as the defendant in a malpractice suit does not appear to cause physicians to discontinue obstetrical practices. Less than one physician in five (19%) who had left the practice of obstetrics by 1986 had been sued, compared to almost twice that percentage (36%) who were still practicing obstetrics. However, suits did seem to cause physicians to be more selective in their obstetrical practices, as almost half (48%) of the physicians who had reduced their obstetrics practice by 1986 reported that they had been sued.

Although Medicaid patients are frequent users of obstetrical services, less than half (45%) of the physicians accepted Medicaid patients for obstetrical care. However, physicians who are still seeing obstetrical patients at their customary level and plan to continue in obstetrics are slightly more likely to accept Medicaid patients (55%). When asked why they did not accept Medicaid payment for obstetrics, three-fourths of the physicians who had reduced their obstetrics practice mentioned

## ASSOCIATION

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risk or liability-related reasons. Only one-third of those maintaining or increasing their obstetrics practice give risk or liability reasons for refusing Medicaid patients.

### Discussion

Obstetrics liability is affecting the practice of Kentucky physicians. Almost all physicians who have practiced obstetrics during the past eight years carry \$1 million in coverage, and a substantial number carry \$3 million or more in coverage. The costs and problems associated with liability are primary factors that have influenced at least one-third of Kentuc-

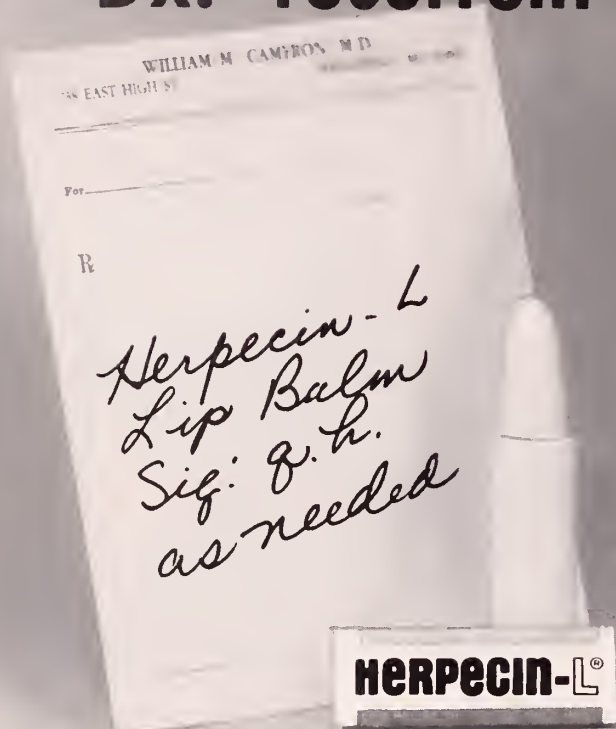
ky's physicians to leave their obstetrics practice and another one-fifth to reduce their obstetrics practice during the past eight years. However, the amount of the annual premiums is not always related to the decision to quit obstetrics. Family practitioners pay much less for liability insurance than do obstetricians/gynecologists, yet family practitioners are more likely to leave the practice of obstetrics. Two thirds of the family practitioners have quit obstetrics during the past eight years, which is five times the rate of obstetricians/gynecologists who leave the practice. Obstetrics is increasingly being limited to obstetrical gynecologists who are paying much higher amounts for the same liability coverage as family practitioners.

There are implications that some regions of the state may experience a shortage of physicians practicing obstetrics. Midwest Kentucky has relied heavily on family practitioners in the past, but with family practitioners leaving obstetrics, only one in five physicians in that region will continue in obstetrics in a few years.

**References** Bonham GS (1986): Kentucky Medical Association Professional Liability Survey. Summary results prepared by the Urban Studies Center, University of Louisville.



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## Scientific Sessions

The Ramada Inn East/Bluegrass Convention Center will host the 1987 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the morning of September 15, 16 and 17. The program scheduled for Wednesday will feature J. Kelley Avery, M.D., Director of CME at St. Thomas Hospital in Nashville. His presentation "Dealing with a Bad Result," will focus on risk management and will be followed with a roundtable discussion conducted by physicians from seven specialty groups who will discuss the impact of risk management on each specialty. A question and answer session will follow.

## Specialty Group

Programs for 22 specialty groups will be held during the afternoons of September 15, 16 and 17. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be

held in the Ramada Inn East and Convention Center. Physicians attending general sessions and specialty group meetings will qualify for Category I Credit.

## KMA House of Delegates

The opening meeting of the House of Delegates will be held Monday, Sept. 14, at 9 a.m. in the Julia Belle Room of the Convention Center. Reference Committee meetings will begin at 2 p.m. on Monday and the final meeting of the House will begin at 6 p.m. Wednesday, Sept. 16. Officers for the 1987-88 Associational year will be elected during the final House meeting.

## Other Activities

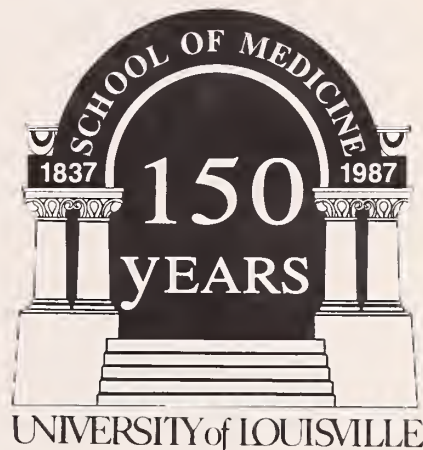
The Annual KEMPAC Seminar will be held Monday, Sept. 14, at the Bluegrass Convention Center. A reception begins at 6 p.m. with dinner at 7 p.m. Kentucky Gubernatorial candidates are scheduled as guest speakers.

The President's Luncheon will be held Sept. 16, with presentations of KMA awards and the installation of the 1987-88

KMA President Donald C. Barton, M.D.

Donald R. Kmetz, M.D., will be the luncheon speaker. As Dean of the U of L School of Medicine, Doctor Kmetz will be discussing the 150 year anniversary for the medical school in his presentation, "University of Louisville School of Medicine, a 150 Year Tradition of Medical Excellence."

In addition, a special recognition of the U of L graduates who have become Presidents of KMA will also be made.





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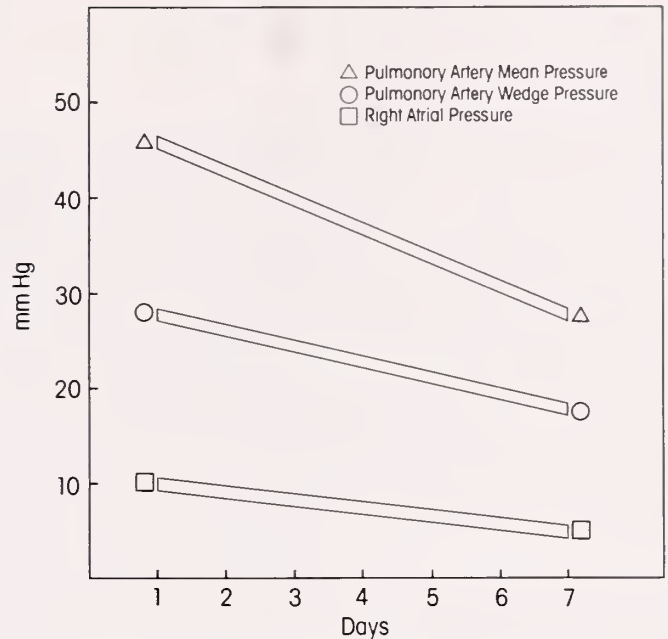
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**References:** 1. Olesen KH, *et al. Postgrad Med J* 51(Suppl 6): 54-63, 1975. 2. Handler B, Dhingra RC, Rosen KM. *J Clin Pharmacol* 21: 706-711, Nov-Dec 1981. 3. Brater DC, *et al. Clin Pharmacol Ther* 34: 207-213, Aug 1983. 4. Brater DC, Fox WR, Chennavasin P. *J Clin Pharmacol* 21: 599-603, Nov-Dec 1981. 5. Davies DL, *et al. Clin Pharmacol Ther* 15: 141-155, Feb 1974.

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Patients should be observed regularly for possible occurrence of blood dyscrasias, liver damage or idiosyncratic reactions. Especially in presence of impaired renal function, use of parenterally administered Bumex should be avoided in patients to whom aminoglycoside antibiotics are also being given, except in life-threatening conditions. Drugs with nephrotoxic potential and bumetanide should not be administered simultaneously. Since lithium reduces renal clearance and adds a high risk of lithium toxicity, it should not be given with diuretics. Probenecid should not be administered concurrently with Bumex. Concurrent therapy with indomethacin not recommended. Bumex may potentiate the effects of antihypertensive drugs, necessitating reduction in dosage. Interaction studies in humans have shown no effect on digoxin blood levels. Interaction studies in humans have shown Bumex to have no effect on warfarin metabolism or on plasminogen activator activity.

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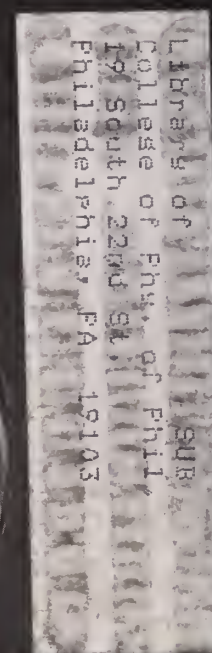
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### Avoid Tunnel Vision

**P**rofessional liability is such a vexatious and pernicious problem that it could obscure our attention to many of the other problems facing Kentucky medicine. As we approach our 1987 KMA House of Delegates and the 1988 Kentucky General Assembly, we must not neglect the other important issues.

- The chronic problem of indigent care is escalating in severity as the cost and complexity of health care increase. The "skimming of the cream" by various private and for-profit ventures and the tightening of money for medical care, by government at all levels, can only increase the difficulty. We must continue to point out the fact that this is a societal problem and will require adequate money regardless of the mechanisms used to care for the 30 or 40 million medically indigent now without medical insurance of any type.
- Third party (including govern-

ment) interference in medical decisions is causing increased pressure to hold down costs and causing serious difficulties in availability and quality of care. We must continue to vocally defend the quality of care and be the patient's advocate in this crucial area. It is vital that we cultivate our relationship with our many elderly patients and impress on them that we are on their side. Our elderly need to understand the implications and long-term effects of many of these ideas which seem attractive at first glance.

- Maintaining an effective, cohesive organization that represents all sectors of medicine is becoming increasingly hard. The growing number of doctors, the multiple delivery systems, medical competition, financial pressures, complex doctor-hospital relationships are all forces which tend to fragment and divide us.

We must maintain a strong organization which speaks for all of Kentucky Medicine.

- We must continue active and effective peer review by local Kentucky physicians to ensure quality care. This should be oriented to education and rehabilitation where needed. Punitive steps should be taken where necessary and then carried out fairly and consistently.

Professional liability is rightfully our number one priority for this year, but we cannot neglect these other vital areas.

**Richard F. Hench, M.D.**  
**KMA President**



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# Gamete Intrafallopian Transfer (GIFT)

## A New Technique for Fertility Therapy

Robert D. Boyd, M.D., Michael W. Vernon, Ph.D., Ken N. Muse, M.D.  
Richard Holland, M.D. and Emery A. Wilson, M.D.

**G**amete intrafallopian transfer (GIFT) has emerged as an alternative treatment of infertility, particularly in selected cases in which conventional methods of therapy have failed. Asch, *et al.*, developed the GIFT procedure and reported the first pregnancy in 1984.<sup>1,2</sup> The procedure is based on our knowledge of the normal reproductive process. Ovarian follicular development and ovulation are under hormonal stimulation. Muscular contractions of the fallopian tube and movement of the cilia help the fimbria to pick up the egg at the time of ovulation and transport it to the ampullary region of the tube. Meanwhile, millions of sperm deposited in the vagina migrate through the cervical mucus and the uterus. Of these initial millions of sperm, only a small percentage will reach the ampullary portion of the tube where fertilization occurs. The fertilized egg or embryo then moves down the tube into the uterus to implant in the endometrium, a process which usually takes four to six days. Any abnormality in the ability of the tube to pick up the ovum or the ability of sperm to reach the tube results in infertility. GIFT has been successful in alleviating these problems.

The GIFT procedure begins with hormonal stimulation of the ovaries so that multiple eggs are produced. (See Figure 1). Our stimulation protocol uses both clomiphene citrate and human menopausal gonadotropins. The ovulation induction process is monitored with serum estradiol concentrations and ultrasound measurements of follicular growth.<sup>8</sup> After appropriate growth is assured, human chorionic gonadotropin is used to trigger ovulation. Ovulation occurs about 36 hours following the hCG injection. However, laparoscopy is performed one to two hours prior to ovulation to collect the preovulatory eggs. The collected eggs are then mixed with previously prepared sperm and the mixture is immediately placed back into the ampullary portion of the fallopian tube where fertilization usually occurs. De-

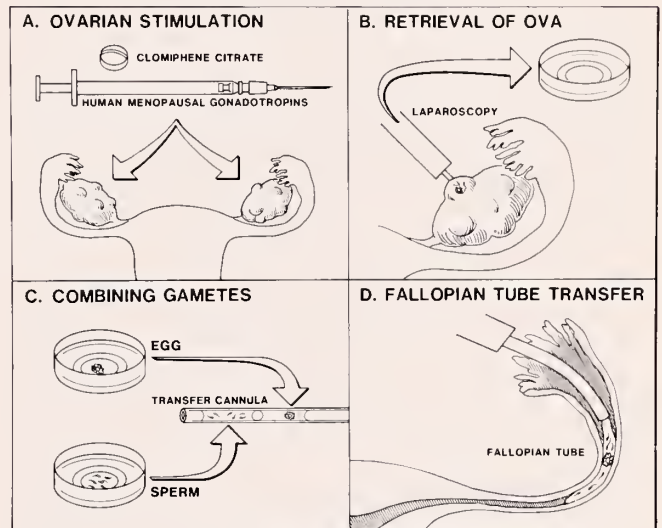


Fig. 1

pending on the number of eggs collected, one to three eggs are placed in each normal tube. The laparoscopy procedure is then terminated and a pregnancy is obtained 10-12 days later.

The advantage of the GIFT procedure is that it assures that adequate numbers of sperm and eggs are present in the appropriate portion of the fallopian tube where fertilization normally occurs. Therefore, problems with ovulation, ovum pick-up and migration of sperm and ovum are bypassed. In addition, the 50,000-100,000 sperm necessary for GIFT is much lower than the 20 million necessary for spontaneous conception, so men who were previously considered infertile could be successful with this procedure. This report describes the first successful pregnancy using GIFT at our Center.

### Case Report

A 26-year-old caucasian woman, gravida 1 para 0, ectopic pregnancy 1, was referred to the Kentucky Center for Reproductive Medicine with a history of infertility. The patient had undergone a right oophorectomy

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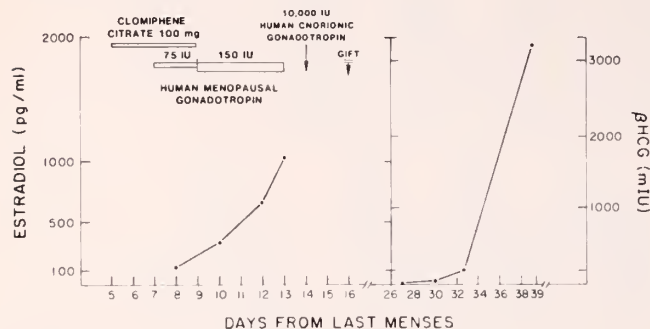


Fig. 2

in May 1984 for a benign adult cystic teratoma (dermoid cyst). A left partial salpingectomy was performed in November 1985 for a ruptured left tubal pregnancy. Therefore, only the left ovary and right tube remained. After conventional methods for infertility failed, including an attempt to achieve pregnancy spontaneously for four months, the patient was scheduled for laparoscopy to determine if the left fallopian tube could be reanastomosed and also to perform GIFT. The patient's husband (28-years-old) had been found to have a normal semen analysis.

Ovulation induction of the single ovary for multiple follicular development was begun by administering clomiphene citrate 100 mg (Clomid; Winthrop) on days five to nine of the menstrual cycle with the addition of intramuscular human menopausal gonadotropins (Pergonal; Serono), one ampule cycle days seven to nine and two ampules cycle days 10-13. Follicular growth was followed with serum estradiol levels and serial ultrasound examinations of the ovarian follicles to insure proper stimulation. When appropriate growth of an adequate number of follicles was assured and the serum estradiol level was greater than 1000 pg/ml, 10,000 IU of human chorionic gonadotropin (hCG, Pregnyl; Organon) was administered intramuscularly which would otherwise induce ovulation 36 hours later.<sup>8</sup> The patient was scheduled for laparoscopy in 34 hours, two hours prior to anticipated ovulation for oocyte retrieval. (See Figure 2).

Laparoscopy was performed under general anesthesia. Carbon dioxide was used for insufflation of the abdominal cavity and a double puncture technique was used for the 10 mm laparoscope and a grasping forceps. The left ovarian ligament was elevated using the grasping forceps to allow better exposure of the ovary. A sharp modified Monash needle was used to aspirate ovarian follicles through the laparoscope. Six follicles were aspirated from the left ovary and the aspirates

were collected in separate, heparinized test tubes. Between each follicular aspiration, the needle and the tube were flushed with a modified Ham's F-10 solution that had previously been tested. Follicular fluid and flush were examined for oocytes. Oocytes were classified into three categories—immature, intermediate, or mature, depending on the expansion of the cumulus oophorus. Three mature oocytes were obtained and placed in Ham's F-10 solution with a 7.5% maternal serum (HF7).

A semen specimen was obtained from the patient's husband approximately two hours before the procedure. Semen analysis revealed a volume of 2.6 ml with a total sperm count of 520 million with 55% motility. The motile sperm were separated from dead sperm by the "swim up" technique and the sperm were then diluted to a final concentration of 50,000 sperm per milliliter. The sperm were placed in 5% CO<sub>2</sub> and air at 37° until used.

A blunted, modified Monash needle was then threaded with a 14 gauge intracath cannula with a 1 cc tuberculin syringe attached to one end. Using sterile technique, the cannula was then loaded in the following order: 20 µl HF7, 10 µl air, 100 µl motile sperm, 10 µl air, 3 mature oocytes in approximately 50 µl HF7, 10 µl air, and 10 µl HF7. The loaded cannula was then placed approximately 1.5 cm into the fimbriated end of the right fallopian tube and the contents gently emptied into the ampullary portion of the tube. The cannula was removed and the fimbriated end of the fallopian tube was observed for spillage of the solution. The emptied cannula was then inspected to assure delivery of all three oocytes into the fallopian tube.

The patient's postoperative course was uncomplicated and she was discharged the same afternoon. She was given progesterone 25 mg in oil daily.

A serum β-hCG was 12 mIU/ml on GIFT plus 11 days. Serial hCG levels increased exponentially and were 41,000 mIU/ml on GIFT plus 36 days. (See Figure 2). An ultrasound performed on day 36 confirmed an intrauterine pregnancy with a fetal crown-rump length of 13 mm which corresponds to a pregnancy of seven weeks, five days.

## Discussion

GIFT has proven to be a successful method for the treatment of infertility with a reported pregnancy rate of 27-29%.<sup>3,6,7</sup> The GIFT procedure has been accomplished by both laparoscopy and mini-laparotomy. Asch and coworkers have reported 100 cases of infertility

treated with GIFT with 28 pregnancies reported (28%). Of the pregnancies reported, 18 (65%) were beyond the first trimester, nine (32%) were spontaneously aborted and one (3.5%) was an ectopic pregnancy.<sup>7</sup> In an earlier report on 45 cases of GIFT, Asch, *et al*, had reported a similar pregnancy rate (29%).<sup>6</sup> Corson, *et al*, described a pregnancy rate of 27% (21% by attempt) compared to an 18% pregnancy rate by in vitro fertilization and embryo transfer (IVF-ET) at the same center.<sup>3</sup>

Indications for GIFT, after conventional methods have proved ineffective, are infertility associated with 1) immunologic factors, 2) low sperm concentrations, 3) luteinized unruptured follicle syndrome, 4) cervical factors, 5) endometriosis and 6) infertility of unknown etiology. This case provides another indication for GIFT: infertility due to the presence of contralateral fallopian tube and ovary.

GIFT has an advantage over in vitro fertilization-embryo transfer in that the procedure is more physiologic than IVF since the gametes are injected directly into the fallopian tube where fertilization normally occurs. GIFT also eliminates the problems associated with embryo incubation and subsequent transfer. This procedure also seems to be better accepted by the major orthodox religions. The main disadvantage of this procedure is that actual fertilization cannot be determined if a pregnancy is not documented and it also requires at least one patent fallopian tube. Although an increased risk of an ectopic pregnancy is a concern, no increase in the ectopic pregnancy rate has been reported. Asch has reported that as many as 55% of the pregnancies (past 12 weeks gestation) resulted in twin gestations.<sup>6</sup>

### Addendum

On February 16, 1987, the patient began labor spontaneously. After a labor of 13 hours, a primary cesarean section was performed for cephalopelvic disproportion and failure to progress. A 3,459 gm male with a 1 minute Apgar of 8 and 5 minute Apgar of 9 was delivered. The postpartum course and neonatal course were both uncomplicated.

**References** 1. Asch RH, Ellsworth LR, Balmaceda JP, et al: Pregnancy following translaparoscopic gamete intrafallopian transfer (GIFT). *Lancet* 2:1034, 1984. 2. Asch RH, Ellsworth LR, Balmaceda JP, et al: Birth following gamete intrafallopian transfer. *Lancet* 2:163, 1985. 3. Corson SL, Batzer F, Eisenberg E, et al: Early experience with GIFT procedure. *J Reprod Med* 31:4, 1986. 4. Asch RH, Balmaceda JP, Ellsworth LR, Wong PC: Gamete intrafallopian transfer (GIFT): A new treatment for infertility. *Int J Fertil* 30:1, 1985. 5. Asch RH, Balmaceda JP, Ellsworth LR, et al: Preliminary experiences with gamete intrafallopian transfer (GIFT). *Fertil Steril* 45:3, 1986. 6. Asch RH, Balmaceda JP, Ellsworth L, et al: Gamete Intra Fallopian Transfer (GIFT). Experiences with an individualized induction of follicular development regime and minilaparotomy (Abstract) *Am Fertil Soc*, Chicago, 1985. 7. Balmaceda JP, Wong PC, Ellsworth L, Asch RH: Results on one-hundred consecutive cases of infertility treated with gamete intrafallopian transfer (GIFT). (Abstract) *Am Fertil Soc*, Toronto, 1986. 8. Muse KN, Wilson EA: Monitoring ovulation induction. Use of biochemical and biophysical parameters. *Seminars in Reproductive Endocrinology*. 4(3):301, 1986.



# Emergency Percutaneous Transluminal Coronary Angioplasty in Acute Myocardial Infarction

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**A**cute myocardial infarction is a result of cellular necrosis caused by a prolonged decrease in oxygen delivery to a region of myocardium. The etiology of acute myocardial infarction in most patients is coronary artery occlusion secondary to coronary artery thrombosis.<sup>1</sup> The thrombus is usually superimposed on a severe atheromatous lesion or a ruptured atheromatous plaque. The atherosclerotic stenosis usually obstructs at least 75% of the luminal area of the coronary artery.<sup>2</sup> The presence of thrombus in a total coronary artery occlusion forms the rationale for thrombolytic therapy during myocardial infarction. The goal of thrombolytic therapy is to limit infarct size and subsequent cardiac events by re-establishing blood flow to the affected area of myocardium as quickly as possible.

The optimal treatment strategy for re-establishing blood flow in a totally occluded coronary artery should meet the following criteria: highest rate of success in re-establishing coronary blood flow; shortest time duration in achieving reperfusion; lowest frequency of procedural complications; and lowest incidence of subsequent cardiac events. Emergency percutaneous transluminal coronary angioplasty (E-PTCA) is currently being investigated as an alternative approach to thrombolytic therapy in the treatment of patients with acute myocardial infarction.<sup>3,4</sup> Limited research has suggested that while both E-PTCA and streptokinase therapy produce acceptable rates of reperfusion during acute myocardial infarction, angioplasty appears to be significantly more effective in reducing residual coronary artery stenosis.<sup>4</sup> In this paper we report our experience with the use of emergency PTCA during acute myocardial infarction. Since the greatest risk for a recurrent cardiac event is in the first six months after infarction, this study involves the follow-up of these

patients for a duration of at least six months after acute myocardial infarction and emergency PTCA.<sup>5</sup>

## Selection of Patients

Patients with acute myocardial infarction under the age of 75 were considered for emergency PTCA. Invasive treatment for myocardial infarction in these patients required evidence of ischemic pain lasting at least 30 minutes and not more than six hours in duration, not relieved by sublingual nitroglycerin or sublingual nifedipine; ST segment elevation of at least two millivolts in two or more involved electrocardiographic leads; and informed consent obtained from the patient and/or family members before entry into the study.

## Procedure

Prior to transportation to the catheterization laboratory, patients were treated with sublingual nifedipine and sublingual or intravenous nitroglycerin in an attempt to relieve pain. In the last 15 patients studied, the addition of 10,000 units of intravenous Heparin bolus was added to the protocol. Emergency PTCA was performed using either the brachial or femoral approach with the vast majority of patients undergoing the brachial approach. A temporary pacemaker wire was placed in the right ventricular apex. Selective coronary angiography was performed first in the presumed uninjured artery and then in the infarct related vessel.

Angioplasty was performed using USCI guiding catheters and USCI steerable balloon catheter systems. The USCI guide wire used first in these patients was the flexible steerable balloon guide wire system. The guide wire was advanced gently to probe the occlusion and if no resistance was met, the guide wire was passed through the occlusion and into the distal portion of the affected vessel. The balloon catheter was advanced over the guide wire and across the total occlusion. Transluminal gradients were measured and the balloon was

## CORONARY ANGIOPLASTY—Dageforde et al

inflated serially until the gradient was reduced to less than 20 mmHg. After completion of PTCA, left ventricular function was determined in the initial group of patients by radionuclide ventriculography and later by digital ventricular angiography.

After completion of emergency PTCA, the patient was transferred to the coronary care unit for conventional treatment. All patients were continued on intravenous heparin with the PTT adjusted between 75 and 150 seconds. Coumadin was started the following morning. All patients were discharged on coumadin and nifedipine therapy. Follow-up was obtained in the office three months, six months, and one year post myocardial infarction. Follow-up included physical examination, resting electrocardiogram, and exercise testing.

### Results

Emergency PTCA was attempted in 65 patients. The clinical characteristics of the 65 patients are shown in Tables I & II. Approximately one-third of the patients undergoing emergency PTCA had suffered a previous myocardial infarction and the mean age of the overall group was 52 years. At the time of emergency PTCA, the mean duration of symptoms was three hours. Fifty-seven percent of patients were noted by electrocardiography to have an anterior wall myocardial infarction, 36% an inferior wall infarction, and 7% a lateral wall myocardial infarction. Ninety-five percent of patients had ST segment elevation and 5% had ST segment depression. After completion of emergency PTCA, 45%

TABLE I Clinical Characteristics of Emergency PTCA Patients		
Characteristics	Patients	Percent
Total Patients	65	100%
Male	51	78.5%
Female	14	21.5%
Mean Age	52	
Previous M.I.	21	32.2%
Mean Onset Symptoms (Hours)	3.0	

TABLE II DISTRIBUTION Age Range of Emergency PTCA Patients		
Age	Patients	Percent
20-29	1	2%
30-39	6	9%
40-49	23	35%
50-59	16	25%
60-69	13	20%
70-79	6	9%

TABLE III PTCA DATA	
Average Initial Gradient	60 mmHg.
Average Final Gradient	12 mmHg.
Average Initial Diameter	99%
Average Final Diameter	23%
Successful Dilatation	97%

TABLE IV LEFT VENTRICULAR ANGIOGRAPHY	
Overall Ejection Fraction	46%
Anterior M.I.	42%
Inferior M.I.	52%
Lateral M.I.	48%

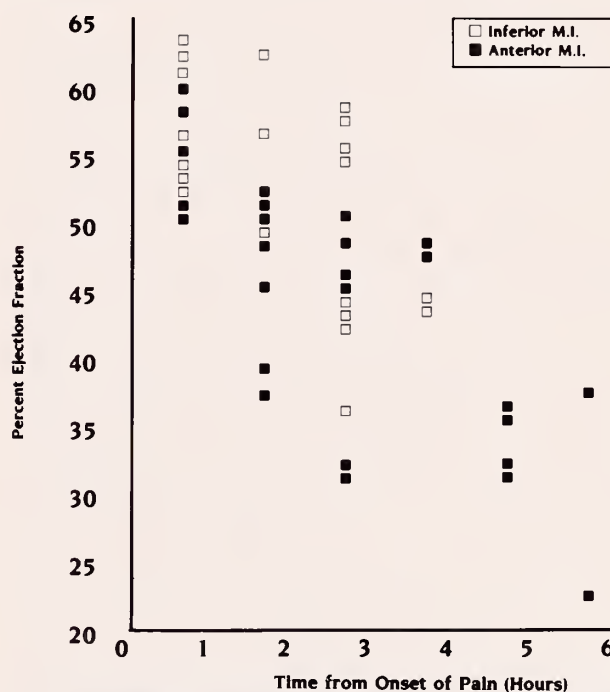


FIGURE 1 EJECTION FRACTION vs TIME FROM ONSET TO SUCCESSFUL DILATATION IN PATIENTS WITH NO PREVIOUS M.I.

of patients had developed Q-waves on their electrocardiogram.

TABLE III reveals the emergency PTCA data from the acute myocardial infarction patients. The average initial gradient was 60 mmHg, with an average final gradient of 12 mmHg. The average initial angiographic diameter lesion was 99% and the average final diameter stenosis was 23%. Successful dilatation was achieved in 97% of patients. Left ventricular angiography performed by digital angiography in 88% of the patients



## CORONARY ANGIOPLASTY—Dageforde et al

and by radio-nuclide ventriculography in 12% of the patients reveals an overall average ejection fraction after successful dilatation of 46%. Patients with anterior myocardial infarctions had an ejection fraction of 42%, inferior wall myocardial infarction 52%, and lateral wall myocardial infarction 48%.

Figure 1 shows a plot of ejection fraction versus time to successful dilatation from onset of symptomatology. As one can see from the graph, the longer duration of time to successful dilatation resulted in a lower ejection fraction. From the graph, the time limit that appears to result in the highest degree of myocardial preservation appears to be less than four hours from onset of chest pain to successful dilatation.

### Complications

Of the 65 patients undergoing emergency PTCA, only one death occurred in the catheterization laboratory. This death occurred in a patient who presented four hours after onset of an acute anterior wall myocardial infarction and upon arrival to the catheterization laboratory, was in cardiogenic shock. The patient had successful dilatation of the left anterior descending artery but cardiogenic shock persisted despite use of the intra-aortic balloon pump and vasopressor therapy. Despite successful recanalization of the left anterior descending artery, the patient failed to improve and expired two hours later. A total of seven patients presented to the catheterization laboratory in clinical cardiogenic shock. Six of the seven patients survived and were discharged from the hospital. One patient not included in the study was a patient who was initially brought to the catheterization laboratory for emergency PTCA; however, after initial coronary angiography demonstrated severe three vessel disease the patient underwent emergency coronary bypass surgery instead of emergency PTCA. The patient expired 36 hours after coronary bypass surgery in cardiogenic shock. Since that time, all patients brought for emergency PTCA have undergone the procedure and

none have required emergency coronary bypass surgery. Of the 65 patients undergoing emergency PTCA, 15% have had triple vessel disease, 25% double vessel disease, and 60% single vessel disease.

Other complications noted in Table V include resistant ventricular tachycardia and ventricular fibrillation in 6% of patients. Cardiac arrest requiring CPR occurred in 6% of patients. No patient died because of resistant ventricular arrhythmia. Essentially all of the 65 patients had reperfusion arrhythmias including multifocal PVCs and accelerated idioventricular rhythm. Six patients or 9% of the study group had acute re-occlusion of the dilated vessel during the procedure and required multiple dilatations. Only one patient had persistent re-occlusion and represents the only unsuccessful dilatation during emergency PTCA therapy.

### Follow-up Data

The average follow-up of the 64 surviving patients in this study was 10 months and the results are noted in Table VI. At the end of follow-up, 57 patients or 88% of the study population were asymptomatic. Five patients had atypical chest pain and were on minimum medical therapy while three patients had clinical angina pectoris, stable on medical therapy. Six patients have developed restenosis and five of those patients have undergone a second successful dilatation. One patient had significant three vessel coronary artery disease and underwent elective triple vessel coronary artery bypass surgery. Two patients presented in the first six months after emergency PTCA with unstable angina pectoris and had new subtotal lesions requiring PTCA. Both of these patients had subtotal lesions in locations where there had been less than 20% luminal irregularities at the time of emergency PTCA. Both of these patients had successful dilatation of their lesions and are currently asymptomatic. There was one death in 64 patients during follow-up. The patient was a 68-year-old male who was five months status post emergency PTCA. The patient had been seen by his physician less than

TABLE V  
COMPLICATIONS

	Patients	Percent
Emergency CABG Surgery	1	1.5%
Ventricular Arrhythmia	8	12%
Ventricular Tachycardia	4	6%
Ventricular Fibrillation	4	6%
Cardiac Arrest - Survival	4	6%
Acute Re-occlusion	6	9%
Cardiogenic Shock	7	11%
Death	1	1.5%

TABLE VI

FOLLOW-UP DATA	Patients	Percent
Average Follow-up 10 months		
Asymptomatic	57	88%
Out-of-Hospital Restenosis	6	9%
Elective CABG	1	1.5%
Second PTCA for new lesion	2	3%
Late Death (out-of-hospital)	1	1.5%

two weeks prior to his death and was asymptomatic at that time. The patient lived alone and was found dead by his family. No autopsy was performed to determine the cause of death.

At the time of follow-up, 88% of the patients are on maintenance medical therapy. Maintenance therapy includes Aspirin grains 5 bid with or without Procardia 10 milligrams tid. Six percent of patients are on maintenance nitrate therapy, and 6% of the patients are on beta blocker therapy. Only two patients require digitalis and diuretic therapy. Eighty percent of the 65 emergency PTCA patients are fully employed while 18.5% of the patients were previously retired or were already on medical disability. Only one patient is currently a cardiac medical disability patient.

### **Discussion**

Each year approximately one-third of all deaths in the United States are due to ischemic heart disease with approximately one-half of these patients dying of acute myocardial infarction. The mortality rates during hospitalization and during the year following acute myocardial infarction are approximately 15% and 10% respectively.<sup>6</sup> The greatest risk for a recurrent cardiac event is in the first six months after acute myocardial infarction.<sup>5</sup> The mortality rate after acute myocardial infarction, both in and out of hospital, is related to the extent of left ventricular dysfunction. Among all acute myocardial infarction survivors, the resting left ventricular ejection fraction is the single best predictor of long term survival.<sup>5</sup> Most variables shown to be predictors of an adverse outcome are in some way related to the extent of left ventricular dysfunction.

The goal of acute interventional treatment in myocardial infarction is to limit infarct size and preserve left ventricular function. The current modes of treatment and their overall successful reperfusion rates in the literature are as follows: Intravenous Streptokinase (IVSK) 50-60%, Intracoronary Streptokinase (ICSK) 70-80%, Tissue Plasminogen Activator (r-TPA) 65-75%, Emergency Coronary Angioplasty (E-PTCA) 85-95%.<sup>4,7,8,9</sup> A progressive increase in cardiac mortality during the first year has been noted as the ejection fraction falls below 40%.<sup>5,10,11</sup> The overall ejection fraction in 65 patients included in this study was 46%. Patients with anterior wall myocardial infarctions had an average ejection fraction of 42%. When patients with previous myocardial infarctions were excluded from this group, the average ejection fraction was 47%. Thus emergency PTCA for acute myocardial resulted in the

majority of the patients having only mild residual left ventricular dysfunction with ejection fractions greater than 40%.

In a recent study, several criteria were identified in patients at moderate or high risk of cardiac events after myocardial infarction.<sup>11</sup> These criteria included patients with severe resting or exercise induced ischemia, severe pump failure, and significant left ventricular dysfunction with a left ventricular ejection fraction less than 35%. By performing emergency PTCA our patients had an average post-MI ejection fraction of 46% thus preventing one of the criteria for a future high risk of cardiac event. Additionally, only two patients in the study had clinical evidence of severe pump failure, another criteria for high risk future cardiac events. The criteria for rest or exercise induced ischemia was reduced in our patient group by successful dilatation of the infarct related artery to a final average residual stenosis of less than 23% and by evaluating the non-involved coronary arteries by coronary arteriography at the time of emergency PTCA. Thus, emergency PTCA performed in our patients was successful in ameliorating left ventricular dysfunction and clinical severe pump failure; and either avoiding residual ischemia in the infarct related vessel, or identifying lesions in the non-infarct related vessels that could be responsible for ischemic events in the future.

We currently use either IVSK or E-PTCA for acute interventional treatment in myocardial infarction patients. The therapeutic "window" for minimizing myocardial damage appears optimally to be up to three hours from the onset of chest pain. Our ejection fraction data confirms the preferred three hour time limit. While IVSK has the advantage of being a non-invasive procedure, several disadvantages are noted when comparing IVSK to E-PTCA. The disadvantages of IVSK are as follows: lower reperfusion rate as noted above; higher early re-occlusion rate of 20-35%; the presence of a significant residual stenotic lesion in 80-85% of patients treated with IVSK requiring further treatment such as PTCA or surgery; and a 1-2% incidence of a major bleeding complication.<sup>7,8,12</sup>

Our current policy is to use emergency PTCA in patients with acute myocardial infarction if seen less than three hours from the onset of pain. For the outlying hospitals we serve, the patients should be transported to the cardiac catheterization laboratory and the E-PTCA procedure started within three hours from the onset of chest pain. A physician and catheterization team are on standby call 24 hours a day, and the average time



from call to start of the procedure is 45 minutes. For myocardial infarction patients with onset of chest pain from three to six hours, we use IVSK initially, followed by PTCA in the following 24 to 48 hours. We feel this study proves that emergency coronary angioplasty can be safely performed in acute myocardial infarction patients. We also feel this study proves the efficacy of emergency PTCA in limiting those risk factors that contribute to high mortality after myocardial infarction including left ventricular dysfunction, clinical pump failure, and residual ischemia. It is likely that additional studies of emergency PTCA will also show a reduced mortality in acute myocardial infarction both acutely and during long term observation.

### Acknowledgments

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**References** 1. DeWood M: Prevalence of total coronary occlusion during the early hours of transmural myocardial infarction. *N Engl J Med* 303:896-902, 1980. 2. Conti C: Acute myocardial infarction: Thoughts about pathogenesis and treatment. *Mod Concepts Cardiovasc Dis* 54:35-38, 1985. 3. Hartzler G: Percutaneous transluminal coronary angioplasty with and without thrombolytic therapy for treatment of acute myocardial infarction. *Am Heart J* 106:965-973, 1983. 4. O'Neill W: A prospective randomized clinical trial of intracoronary streptokinase versus coronary angioplasty for acute myocardial infarction. *N Engl J Med* 314:812-817, 1986. 5. Veller G: Risk stratification and survival after myocardial infarction. *Mod Concepts Cardiovasc Dis* 55:5-10, 1986. 6. Braunwald E: Heart disease a textbook of cardiovascular disease, W. B. Saunders Company, 1984, p. 1262. 7. Laffel G: Thrombolytic Therapy. *N Engl J Med* 311:710-717, 1984. 8. Gersh B: Role of thrombolytic therapy in evolving myocardial infarction. *Mod Concepts Cardiovasc Dis* 54:13-17, 1985. 9. Prida X: Percutaneous transluminal coronary angioplasty in evolving acute myocardial infarction. *Am J Cardiol* 57:1069-1074, 1986. 10. Moss A: Risk stratification and survival after myocardial infarction. *N Engl J Med* 309:331-336, 1983. 11. DeBusk R: Identification and treatment of low-risk patients after acute myocardial infarction and coronary artery bypass graft surgery. *N Engl J Med* 314:161-165, 1986. 12. Harrison D: Rethrombosis after reperfusion with streptokinase: Importance of geometry of residual lesions. *Circulation* 69:991-999, 1984.

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# Amiodarone Induced Encephalopathy and Diabetes Insipidus

Prasad R. Palakurthy, M.D., Vasudeva Iyer, M.D. and Jon Klein, M.D.

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*Amiodarone therapy is associated with significant neurotoxicity mostly involving peripheral nervous system. However, encephalopathy and diabetes insipidus complicating amiodarone therapy have not been reported before. This paper describes a patient with serious ventricular arrhythmias who developed a clinical picture of encephalopathy and diabetes insipidus following therapy with amiodarone for 12 days. The clinical condition improved rapidly on discontinuing amiodarone. The complete reversal of neurological picture and the database insipidus suggested that amiodarone may have been the causative agent.*

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Amiodarone therapy is associated with significant neurotoxicity including tremor, ataxia and peripheral neuropathy.<sup>1,2</sup> Encephalopathy secondary to amiodarone has not been reported in the past. Although diabetes insipidus may be induced by various drugs, the role of amiodarone, if any, on the antidiuretic hormone (ADH) is unknown. A patient who developed an unusual encephalopathy and diabetes insipidus during amiodarone therapy is described in this paper.

## Case Report

A 67-year-old white male presented with signs and symptoms of heart failure. He was treated with digoxin and a diuretic. A diagnostic cardiac catheterization revealed dilated and diffusely hypokinetic left ventricle and a 30 mmHg gradient across the aortic valve. Coronary arteriography revealed insignificant coronary artery disease. During the initial hospitalization the patient

was noted to have frequent premature ventricular depolarizations (PVDs) and multiple runs of nonsustained ventricular tachycardia which did not respond to quinidine, procainamide and tocainide administration. Therapy was initiated with amiodarone when the patient experienced loss of consciousness associated with ventricular flutter at the rate of 250 beats per minute, which responded to thump cardioversion. After 10 days of amiodarone, the patient complained of poor appetite and shortness of breath. Continuous cardiac monitoring revealed frequent PVDs and runs of three to five beat ventricular tachycardia.

After 12 days of treatment with amiodarone, the patient developed marked dyskinesia. Neurological examination revealed an obtunded patient who appeared to be oriented in place and person. The most striking feature was the abnormal movement which consisted of orofacial dyskinesia, ocular movements resembling opsoclonus and frequent spontaneous eyelid opening and closure. A 6-8 Hz jaw tremor was also noted. There was some decrease in motor strength in the upper and lower extremities, more marked on the left side but no definite changes in tendon reflexes could be elicited. The plantar responses were downgoing. No evidence of cerebellar dysfunction in the form of incoordination or intention tremor was noted. Gait could not be tested. His laboratory data revealed a sodium of 160 mEq/L with serum osmolality of 319 mOsm/liter and urinary osmolality of 288 mOsm/liter, BUN was 25 mg/DL and creatinine of 1.6 mg/DL. His serum arginine vasopressin level at that time was 1.6 pg/ml (normal 1.0-13.3 pg/ml). Diabetes insipidus was suspected and he was given 5 units of pitressin and urinary specific gravity was measured every 30 minutes. Initial specific gravity was 1008 with no increase over the next two hours. A CT scan revealed mild diffuse cerebral atrophy. A brain stem auditory evoked potential study showed absence of replicable wave forms on right ear stimulation and normal potentials on left. EEG showed slowing of background activity compatible with a mild diffuse encephalopathy.

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It was suspected that the neurologic syndrome and diabetes insipidus may be related to amiodarone therapy on the basis of their temporal correlations. Amiodarone was withdrawn completely. Five days after stopping amiodarone, the patient's mental and neurologic status improved considerably. His dyskinesia had almost disappeared. His serum sodium along with serum and urinary osmolalities returned to normal with intravenous fluids. Ten days after stopping amiodarone, he was started on propafenone (150 mg q 12 h) as he continued to have short runs of ventricular tachycardia. The patient demonstrated a similar neurologic syndrome after receiving this drug for three days. Subsequent course was downhill despite discontinuation of propafenone. He showed signs of intraabdominal sepsis associated with marked leucocytosis which was thought to be secondary to diverticulitis. He died on the 40th day of hospitalization and permission for an autopsy was not granted.

### Discussion

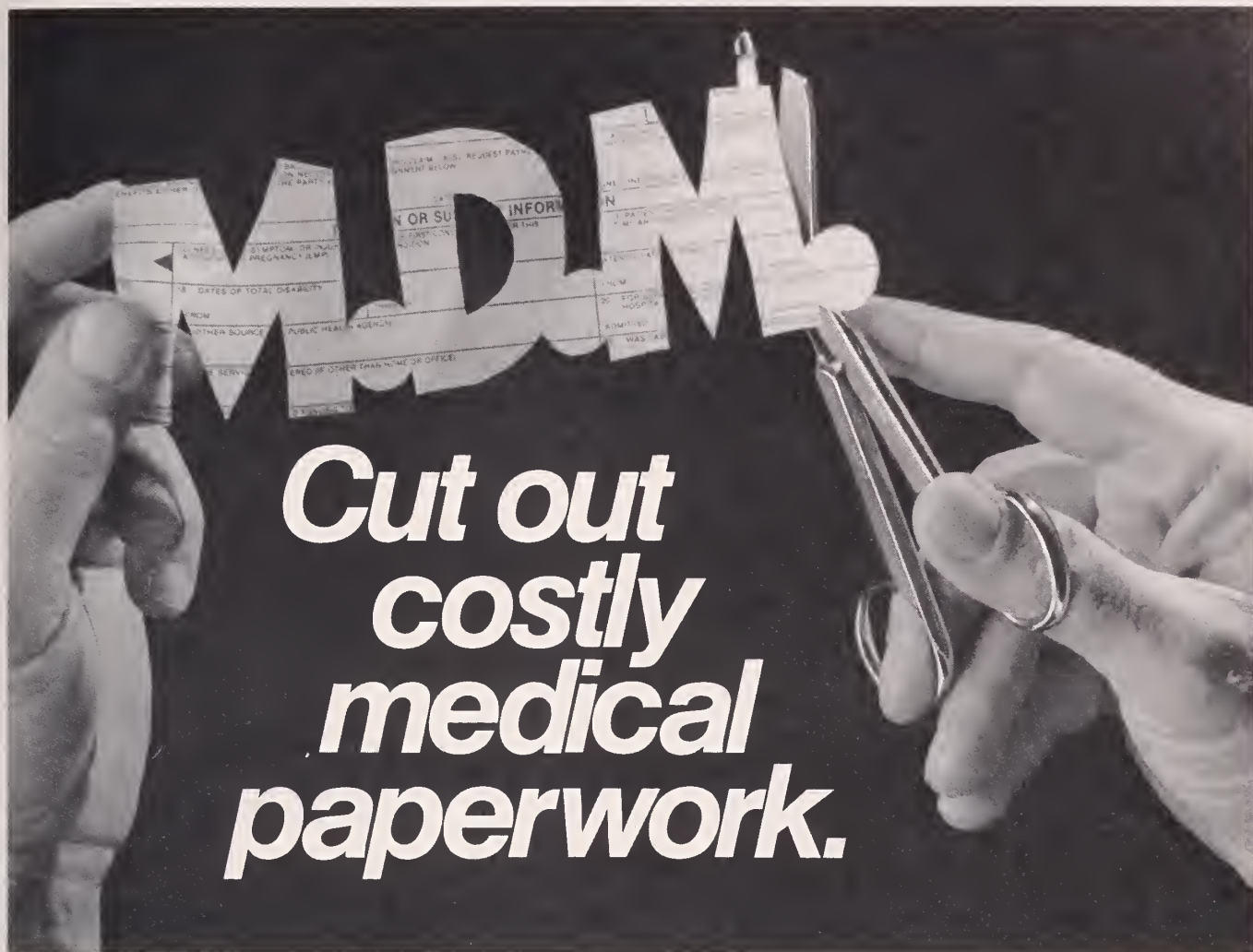
This patient developed an unusual neurologic syndrome which occurred both after amiodarone and propafenone therapy. The initial episode of the neurologic syndrome appeared reversible and the clinical picture suggested a combination of basal ganglia and brain stem dysfunction. The movement disorder this patient experienced had a distinct resemblance to dyskinesia that sometimes follows neuroleptic therapy. It is possible that a transient functional abnormality in dopamine or catecholamine mediated pathways may have been induced by amiodarone.

It is difficult to speculate how both the drugs caused the same clinical picture, although they are not similar in their chemical structure. Similar reappearance of neurotoxicity has been reported in the past<sup>3</sup>. A uremic patient developed an extrapyramidal syndrome of dystonic type after administration of metoclopramide for vomiting. She responded in the same way to amiodarone given for angina pectoris several months later. The syndrome was reproducible and its intensity was proportional to dosage. The extrapyramidal manifestations were reproduced a second and third time after low doses of amiodarone (100 mg/day), developing on day five and day six, respectively. The syndrome had gone completely 24-48 hours after discontinuation of treatment.

Abnormalities in ADH secretion are known to occur with various neurologic syndromes like encephalitis, head trauma and neurological procedures<sup>4,5</sup> and also secondary to a large number of drugs.<sup>4</sup> It has not been

reported as a complication of amiodarone therapy. The diabetes insipidus in this patient appeared to be a mixed one. His arginine vasopressin level was inappropriately low in the presence of an elevated serum osmolality. However, when challenged with an initial dose of the pitressin, the patient did not respond suggesting the presence of nephrogenic component. There was excellent response to treatment with intravenous fluids and discontinuation of amiodarone. It is possible that the diabetes insipidus state was induced by amiodarone as it occurred after starting the drug, and disappeared promptly once the drug was withdrawn.

**References** 1. Fogoros R, Anderson K, Winkle R, Swendlow C, Mason J: Amiodarone: Clinical efficacy and toxicity in 96 patients with recurrent drug refractory arrhythmias. *Circulation* 1983;68:88-94. 2. Harris L, McKenna W, Rowland E, Holt D, Stoney G, Krikler DM: Side effects of long term amiodarone therapy. *Circulation* 1981;64:273-279. 3. Lloveras J, Masramon J, Aubia J, Llorach M: Amiodarone, metoclopramide and renal failure. *Lancet* 1979;1:981-982. 4. Schrier RW, Leaf A: Effect of hormones on water, sodium, chloride and potassium metabolism. In: Williams RH eds. Text book of endocrinology. Ed 6 Philadelphia: WB Saunders Company:1981:1032-46. 5. Hadani GM, Findler G, Shaked I, Sahan A: Unusual delayed onset of diabetes insipidus following closed head trauma. *J Neurosurg* 1985;63:456-8.



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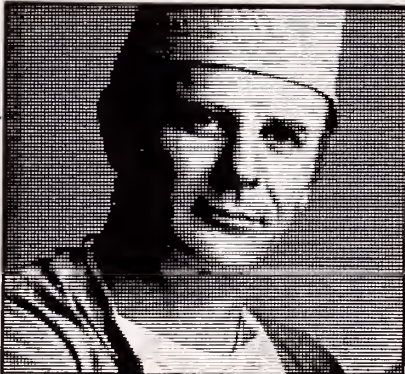
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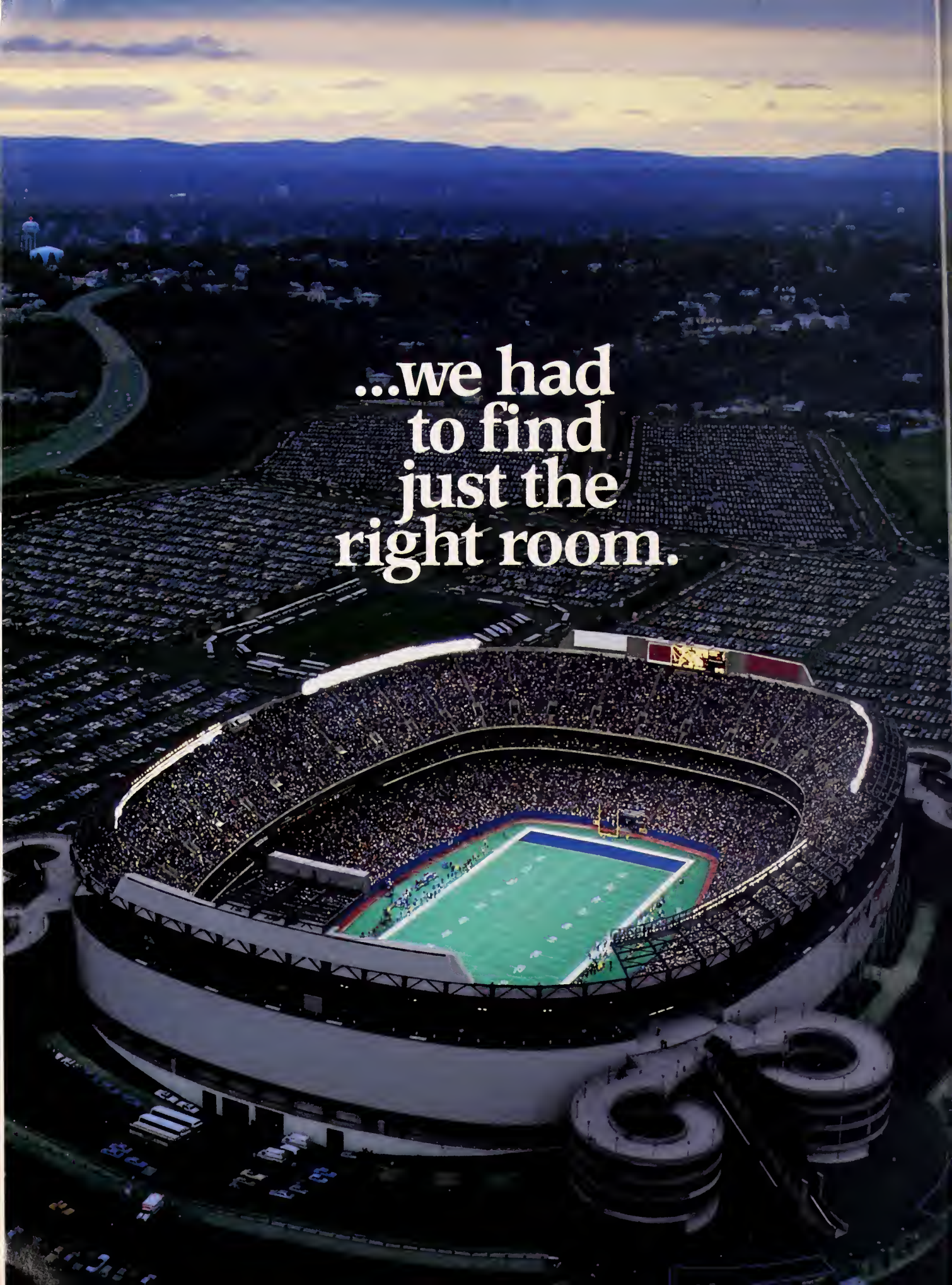
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hypertensives stayed on

**INDERAL<sup>®</sup> LA**  
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after a major nationwide trial...





An aerial photograph of a large, modern stadium at dusk. The stadium is filled with spectators, and a football game is in progress on the green field. The stadium's architecture features a large, curved roof and multiple tiers of seating. The surrounding area includes parking lots, roads, and some buildings. The sky is a mix of orange and blue, indicating sunset or sunrise. The text "...we had to find just the right room." is overlaid in the center of the image.

...we had  
to find  
just the  
right room.



# 60,073 patients (90%) who started on INDERAL LA stayed on INDERAL LA.<sup>1\*</sup>

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## Surprising? Not really.

Because most patients on INDERAL LA (propranolol HCl) don't even know it's working.

A recent double-blind, placebo-controlled, crossover study in 138 hypertensive patients<sup>2</sup> revealed that INDERAL LA has a side effects profile unsurpassed by atenolol or metoprolol — which shows how well-tolerated once-daily INDERAL LA can be.

## Sole therapy or concomitant therapy?

**Fifty-nine percent of the time, INDERAL LA stood on its own.**

The patients in the nationwide compliance trial were no different from yours. Generally when the antihypertensive regimen is complicated, compliance may become a problem. So, the effectiveness of INDERAL LA as once-daily monotherapy is a big plus. Of the remaining hypertensives in the program, 36% were treated merely with the addition of a diuretic to INDERAL LA.

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Almost 20,000 of the patients in the nationwide compliance trial were identified as having been noncompliant with their previous antihypertensive therapy. Their physicians reported that 88% showed improved compliance when placed on once-daily INDERAL LA.

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ONCE-DAILY  
**INDERAL<sup>®</sup> LA**  
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Like conventional INDERAL Tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma.

\*After a 30-day trial with INDERAL LA, physicians reported that 90% of the patients would remain on INDERAL LA.

**The one you know best  
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**INDERAL<sup>®</sup> LA 60 mg**  
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BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR)

## INDERAL® LA brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

Inderal LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

Inderal LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal, as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE. Hypertension:** Inderal LA is indicated in the management of hypertension. It may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first-degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS. CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it is usually advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Inderal (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers. **DIABETES AND HYPOGLYCEMIA.** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing  $T_4$  and reverse  $T_3$ , and decreasing  $T_3$ .

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case, this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS. GENERAL.** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should

be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**CLINICAL LABORATORY TESTS.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytin, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected  $T_3$  concentration when used concomitantly with propranolol.

Camelidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY.** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS.** Inderal is excreted in human milk. Caution should be exercised when Inderal (propranolol HCl) is administered to a nursing woman.

**PEDIATRIC USE.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular.** Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

**Central Nervous System.** Light-headedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, vivid dreams, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy and vivid dreams appear dose related.

**Gastrointestinal.** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic.** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory.** Bronchospasm.

**Hematologic.** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-Immune.** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous.** Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence and Peyronie's disease have been reported rarely. Oculocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg Inderal LA once daily.**

**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. Inderal LA National Compliance Evaluation Program. Data on file, Ayerst Laboratories.
2. Ravid M, Lang R, Juinn I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985; 145:1321-1323.

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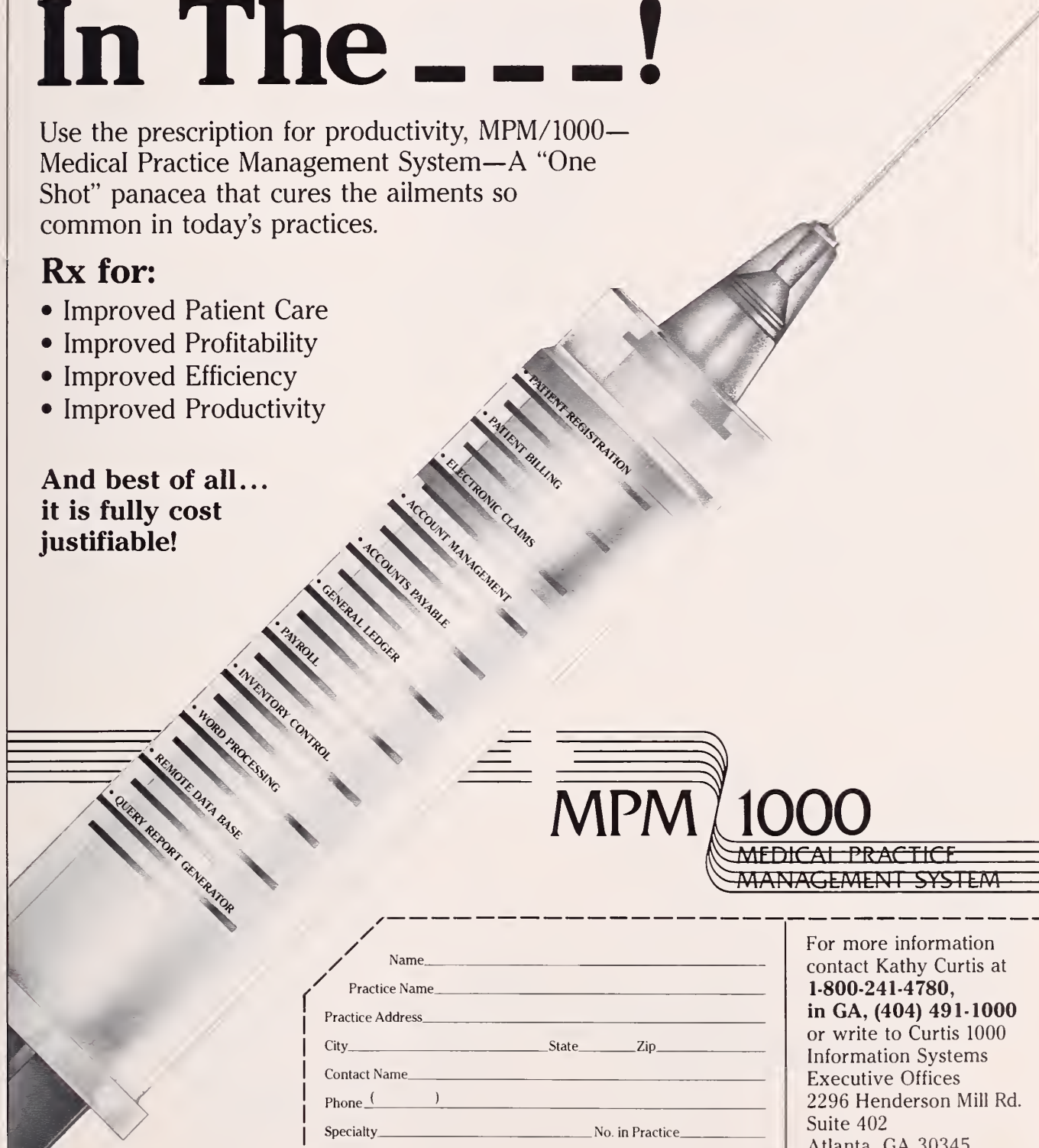
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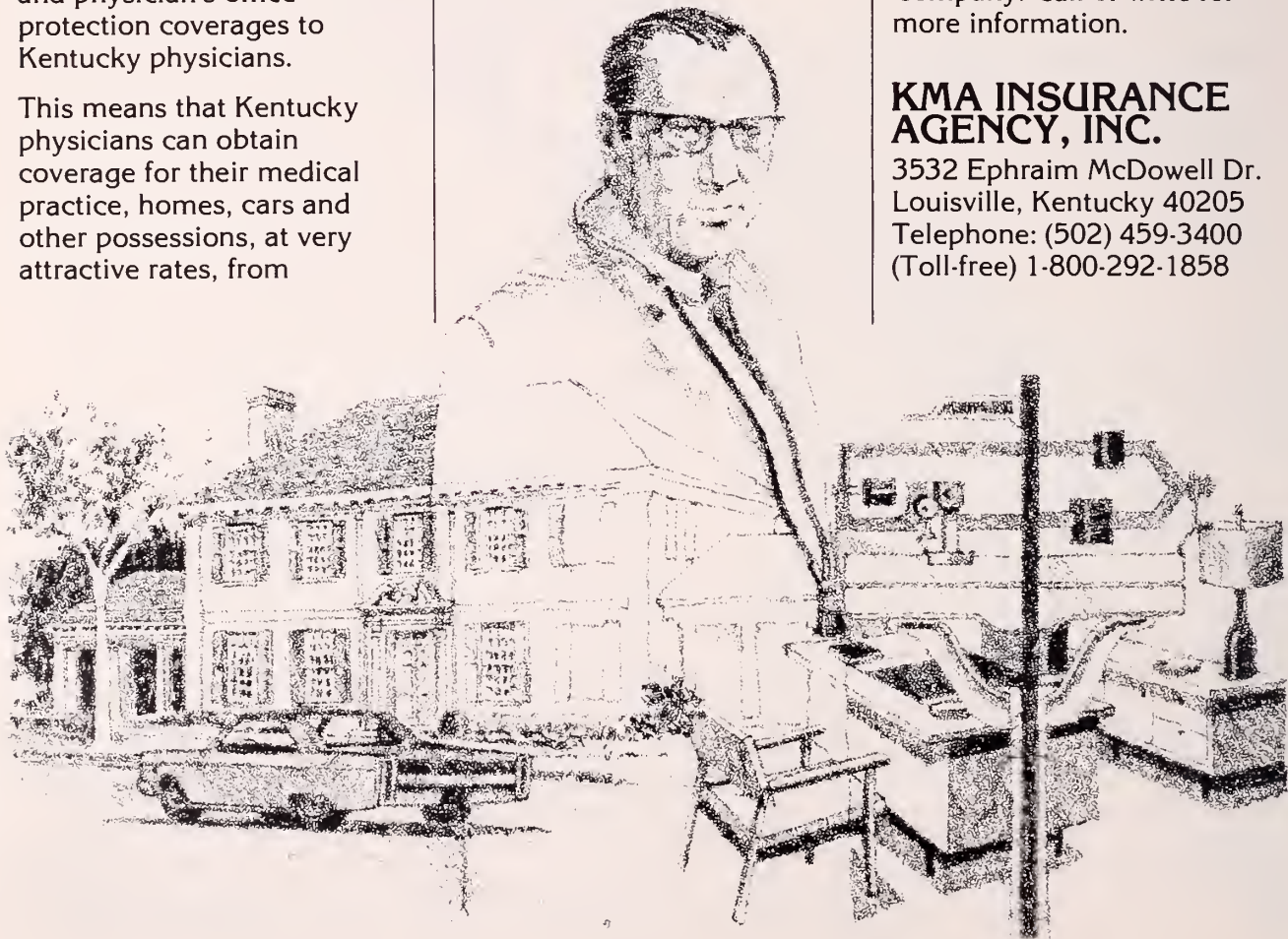
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# Medical School Anniversary



The medical school in Louisville is 150 years old this year. In 1837, Louisville was a bustling commercial center for the river trade, but hardly an Athens of the west for graduate study. To conceive and execute the plan for a medical school here at that time took wisdom, foresight and perhaps a great deal of courage. And then to preserve through the trade school era of medical schools and continue the quest for scholarship and knowledge among faculty and students was indeed an achievement of note.

In the 1950's, the medical school buildings were not imposing as a seat of graduate learning. And after the climb up the four flights of iron stairs to the anatomy lab, the wisdom of ones medical school choice was in some doubt. The doubt was furthered by the hot box environment of the anatomy lecture hall and the aggressive, if not hostile, demeanor of the anatomy professor. All

this was depressing and unsettling to the neophyte.

As time passed a certain change in perception occurred. The dinginess of our surroundings was forgotten in the excitement of the learning process. The aggressiveness of the anatomy professor now became palpable enthusiasm for his subject. The climb up the stairs was the

same but the desire to help and encourage was evident among the preclinical faculty. By the end of the second year there was pride in the material learned and a comraderie among the class that rivaled that of college experiences.

The third and fourth years were a repeat of the first two. The old General Hospital with its 40 bed wards, leaking pipes and 19th century elevators was not exactly a state-of-the-art physical plant. But the pathology was there. The teachers though a few in number were dedicated and accessible; and if one were willing to work (and most of us were), the knowledge and training were more than adequate, and in some situations, absolutely superb.

I am grateful to the faculty of the Medical School in those years. Whatever I am as a doctor, I owe to them. It was a job well done.

**Paul C. Grider, Jr., MD**



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**Pamela H. Potter**

## Today's Visions are Tomorrow's Realities

**T**he beginning of a new Auxiliary year is an appropriate time to review where we have been and to plan where we are going. Our theme for the past year was "AKMA: We're giving medicine a good name." That really is true. A quick look at some of our accomplishments supports that statement.

In 1986-87, Kentucky auxiliarians raised more than \$45,000 for AMA-ERF. During the last 15 years, our Health Careers Loan Fund has given more than \$85,000 in financial aid to students of the Allied Health Professions. The Auxiliary's support of McDowell House has helped to make it one of the outstanding historical homes in the nation and a credit to its owner, the Kentucky Medical Association. And don't forget the Ronald McDonald Houses. Auxiliarians led the drive to establish the two houses in Kentucky, and the Auxiliary has continued to provide support to keep them going.

But, when we talk about giving medicine a good name, we really need to talk about our almost 1300 members who give so generously of their time and talents to help others. Auxiliarians across the state working through their county auxiliaries, in coalition with other organizations, and individually, gave almost 60,000 hours last year to improve the quality of life in their communities.

It's obvious to me that when it comes

to giving medicine a good name, we're on the right track, but, as Will Rogers once said, "Even if you're on the right track, you'll get run over if you just sit there." Just being on the right track isn't enough, we've got to keep moving ahead.

Last year, the AKMA Planning Committee examined some of the challenges facing the Auxiliary in our four major program areas. Goals were established for the coming year to focus our attention on meeting those challenges. I believe that these goals are within our grasp because I believe that we can do what we think we can do, and I think we can do a great deal.

**I THINK WE CAN EXCEED \$55,000.00 IN CONTRIBUTIONS TO AMA-ERF THIS YEAR.** Our AMA-ERF goal evidences the Auxiliary's firm commitment to do its part to insure that quality medical care will remain available to the residents of Kentucky in the years to come.

**I THINK WE CAN INCREASE AKMA MEMBERSHIP BY 10% THIS YEAR.** By providing additional support services for county membership chairmen, by organizing new auxiliaries in counties where potential members reside, and by more effectively recruiting our members-at-large, the Auxiliary will promote membership in organized medicine in 1987-88.



IN THE AREA OF HEALTH PROJECTS, I THINK WE CAN TRAIN 100 VOLUNTEER AIDS EDUCATORS THIS YEAR. The Public Health Service has said that until a cure is found (and many believe a cure won't be found until the next century) the greatest hope for controlling the AIDS epidemic lies in teaching the public how to avoid acquiring and spreading the disease. AKMA will work in coalition with other organizations to sponsor an AIDS education workshop for volunteers this fall.

I THINK WE CAN HELP SECURE PASSAGE OF TORT REFORM LEGISLATION IN KENTUCKY IN 1988. As a charitable corporation, the Auxiliary does not, as an organization, take a position on specific legislative pro-

posals, but we can't afford to sit idly by and wait for something to happen. We must educate ourselves on the issues, so that we will be able to make informed decisions regarding legislative proposals that we can support as individuals. We must also motivate ourselves and others to take appropriate action to secure passage of those proposals. I hope that KMA and the Auxiliary will be working together to lead the way.

I don't claim that the goals I have outlined will be easy to achieve, but I do believe they are achievable. It has been said that: "Belief is the knowledge that we can do something. It's the inner feeling that what we undertake, we can accomplish. For the most part, all of us

have the ability to look at something and know whether or not we can do it. So, in belief there is power: our eyes are opened; our opportunities become plain; our visions become realities."

I believe in the Auxiliary. Time after time, I have seen our auxiliaries accomplish what they have undertaken. With the tremendous volunteer resources we have available to us, I believe that our accomplishments are limited only by our imagination. As I look at each goal, I know that the Auxiliary can do it. Today these goals are only visions of what can be, but TODAY'S VISIONS ARE TOMORROW'S REALITIES.

**Pamela H. Potter**  
**AKMA President**

## CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. \$5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

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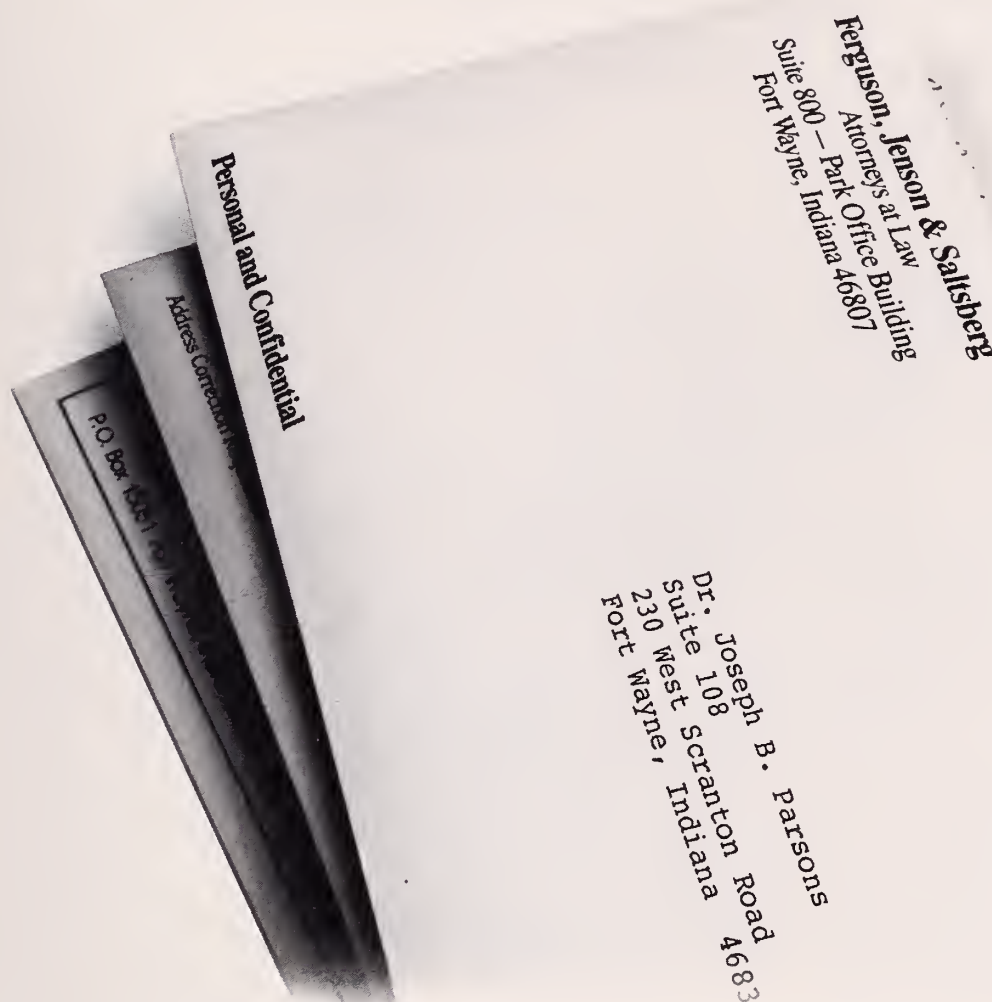
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**Brief Summary:** Consult the package literature for prescribing information.  
**Indications and Usage:** Keflet™ Tablets (cephalexin, Dista) are indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Respiratory tract infections caused by *Streptococcus pneumoniae* and group A  $\beta$  hemolytic streptococci (Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. Keflet is generally effective in the eradication of streptococci from the nasopharynx; however, substantial data establishing the efficacy of Keflet in the subsequent prevention of rheumatic fever are not available at present.)

Otitis media due to *S. pneumoniae*, *Haemophilus influenzae*, staphylococci, streptococci, and *Neisseria catarrhalis*

Skin and skin structure infections caused by staphylococci and/or streptococci

Bone infections caused by staphylococci and/or *Proteus mirabilis*  
Genitourinary tract infections, including acute prostatitis, caused by *Escherichia coli*, *P. mirabilis*, and *Klebsiella* sp.

**Note:** Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.  
**Contraindication:** Keflet is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

**Warnings:** BEFORE CEFALOXIN THERAPY IS INSTITUTED CAREFUL INQUIRY SHOULD BE MADE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO CEPHALOSPORINS AND PENICILLIN. CEPHALOSPORIN C DERIVATIVES SHOULD BE GIVEN CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS.

SERIOUS ACUTE HYPERSENSITIVITY REACTIONS MAY REQUIRE EPINEPHRINE AND OTHER EMERGENCY MEASURES.

There is some clinical and laboratory evidence of partial cross allergenicity of the penicillins and the cephalosporins. Patients have been reported to have had severe reactions (including anaphylaxis) to both drugs.

Any patient who has demonstrated some form of allergy, particularly to drugs, should receive antibiotics cautiously. No exception should be made with regard to Keflet.

Pseudomembranous colitis has been reported with virtually all broad spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life threatening.

Treatment with broad spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

**Usage in Pregnancy:** Safety of this product for use during pregnancy has not been established.

**Precautions: General:** Patients should be followed carefully so that any side effects or unusual manifestations of drug idiosyncrasy may be detected. If an allergic reaction to Keflet occurs, the drug should be discontinued and the patient treated with the usual agents (eg, epinephrine or other pressor amines, antihistamines, or corticosteroids).

Prolonged use of Keflet may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Keflet should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

Indicated surgical procedures should be performed in conjunction with antibiotic therapy.

As a result of administration of Keflet, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistix® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

**Usage in Pregnancy—Pregnancy Category B:** The daily oral administration of cephalexin to rats in doses of 250 or 500 mg/kg prior to and during pregnancy, or to rats and mice during the period of organogenesis only, had no adverse effect on fertility, fetal viability, fetal weight, or litter size. Note that the safety of cephalexin during pregnancy in humans has not been established.

Cephalexin showed no enhanced toxicity in weanling and newborn rats as compared with adult animals. Nevertheless, because the studies in humans cannot rule out the possibility of harm, Keflet should be used during pregnancy only if clearly needed.

**Nursing Mothers:** The excretion of cephalexin in the milk increased up to 4 hours after a 500-mg dose; the drug reached a maximum level of 4 µg/mL, then decreased gradually, and had disappeared 8 hours after administration. Caution should be exercised when Keflet is administered to a nursing woman.

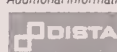
**Adverse Reactions: Gastrointestinal:** Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely. The most frequent side effect has been diarrhea. It was very rarely severe enough to warrant cessation of therapy. Dyspepsia and abdominal pain have also occurred. As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

**Hypersensitivity:** Allergic reactions in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens Johnson Syndrome, or toxic epidermal necrolysis have been observed. These reactions usually subside upon discontinuation of the drug. Anaphylaxis has also been reported.

Other reactions have included genital and anal pruritus, genital moniliasis, vaginitis and vaginal discharge, dizziness, fatigue, and headache. Eosinophilia, neutropenia, thrombocytopenia, and slight elevations in SGOT and SGPT have been reported.

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## **Malpractice Depositions**

### **Avoiding The Traps**

*Raymond M. Fish, PhD, MD and Melvin E. Ehrhardt, MD, JD*

*Medical Economics Books, Oradell, New Jersey 07649*

Depositions are becoming part of the medical world. Sworn testimony on either side, plaintiff or defendant, given during a deposition can be used in constructing a case, in court or in settlement. Whether as a defendant, plaintiff or expert, the physician should become comfortable — if this is possible — with this legal exercise.

In a well written book, the authors take the reader through the deposition experience. Preparation for the deposition is emphasized. Research relevant topics, study the records, analyze the problems — all with the help and supervision of your lawyer. Chapters then follow on tricky questions, psychological warfare, traps, handling your transcript, and using expert wit-

nesses. Several areas in the book deal with preparing and maintaining physical well-being. Conditioning is important for the arduous task. Coming to the deposition well rested, free of medicine and drugs, and being comfortable during the proceedings seem to optimize one's performance.

Throughout the book the rights of the deponent are explained and highlighted. Documentation of legal precedent as well as legal etiquette afford the witness protection and some refuge.

Lists of questions, predicaments, mistakes and tactics are dotted throughout the book. Topics are emphasized with bold type, allowing the reader to dissect out topics germane.

Examples from actual depositions highlight various areas, giving plaintiff and defendant attorneys' methods, questions and motives. Some sections give the reader a trial run through possible difficulties that might be encountered.

Somehow reading this book gives me comfort, in the sense of a "how to book." Lawsuits are with us and threaten us today as never before. Priced at \$24.95, paperback, portable and quite readable, this book is likely to become part of the medical armamentarium!!

## **Evaluating Orthopedic Disability**

### **A Commonsense Approach**

*T. Rothrock Miller, MD*

*Medical Economics Books, Oredell, N.J. 07649*

From the pen of a native son, this popular (second edition) paperback may be useful to many physicians. Obviously the orthopod needs to be knowledgeable in this field, but also the occupational physician, and the non physician community — insurance adjusters, lawyers, physical therapists, *etc* — are intimately involved in this area.

For those of us who want to learn the functional anatomy of the musculoskeletal system, reading this will be an added help. In fact the simple straightforward approach, many line drawings, and numerous photographs are very educational. For the most part the photographs are of excellent quality, but nevertheless illustrate relevant points in the text.

Initially the "essential steps in evaluating disability" are explained, including taking a history, conducting

a careful physical exam, observing the patient, X-rays, and the written report make the reader familiar with the process.

Each chapter that follows conforms to a reconstruction of this procedure, but with different parts of the body — neck, cervical spine, thoracic bone structure, upper and lower extremity and the lower back.

Finally the preparation of the report is discussed, with the emphasis on clear language, appropriate detail, considered conclusions and the necessity for privacy. Several excellent examples illustrate typical reports and are good models.

Some mention is made of legal matters. Reports concerning disability are germane to not only compensation boards, but to employers, lawyers and job placement organizations. Legal testimony may be required, demand-

ing documented findings and the ability to explain the methods of evaluating disability.

Regularly Dr. Miller points out that only the functional impairment can be evaluated by the physician. Occupational disability is an administrative or judicial decision.

Recent laboratory and radiological advances have been incorporated, including bone scans, computerized axial tomography and now magnetic resonance imaging.

Informative, easily read, illustrated — this book deserves its second edition.

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*Stephen Z. Smith, M.D.*  
*Book Review Editor*

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## Highlights of KMA Board Meeting



KMA Board of Trustee members.

Board members attending the April KMA Board of Trustees meeting listened to officers reports, approved the 1987-88 budget, made committee appointments and endorsed appointments of ad hoc committees on Indigent Care and the development of AIDS guidelines.

John S. Llewellyn, M.D., Secretary for the Board of Medical licensure, reported that the Board's inquiry panels meet monthly to review investigative reports and determine if action against a physician's license is warranted. He stated that out of 60 cases reviewed this year, formal complaints had been lodged against 13 physicians, resulting in six revocations, three probations and two suspensions.



KMA President Richard F. Hench, M.D., (right) presents a bound volume of the KMA Journal to KMA past President Wally O. Montgomery, M.D.



Doctor Hench congratulates A. Evan Overstreet, M.D., for his work as Editor of the KMA Journal and presents him with a bound volume.

## ASSOCIATION

Doctor Llewellyn also reported that the Board of Medical Licensure had appointed a committee to study the issue of hospital/physician relationships, which will consider adopting guidelines to assist physicians when entering into agreements with hospitals. William B. Monnig, M.D., Edgewood, has been named as KMA's representative to that committee.

Nelson B. Rue, M.D., Board Chairman, reported that he had given testimony on AIDS at a meeting of the Committee on Health and Welfare of the Kentucky General Assembly, and it seemed appropriate for KMA to develop policy guidelines relating to AIDS. Doctor Rue stated that an ad hoc committee had been appointed with Ardis D. Hoven, M.D., Lexington, serving as Chairman.



**John S. Llewellyn, M.D., Secretary of the Board of Medical Licensure.**

During the meeting a motion was made by the Board to adopt a proposal developed by the KMA Committee to Investigate Changing Trends in Medicine that outlines suggestions for educating patients about various aspects of alternative delivery systems and for providing advice to physicians preparing to sign contracts to deliver care through prepaid systems. A possible joint venture with the Jefferson County Medical Society will be considered after collecting more information.

In Legislative Activities it was reported that since the "charge" to the Committee on State Legislative Activities had been changed to one of "issue analysis," thought was being given to dividing the committee into small groups to consider various issues. Some of the issues include: health care for the medically indigent; matters related to non-physician practitioners; patients' direct access to medical records; proposals regarding AIDS; mandatory participation in Medicaid and mandatory acceptance of assignment under Medicare, both as conditions of licensure.



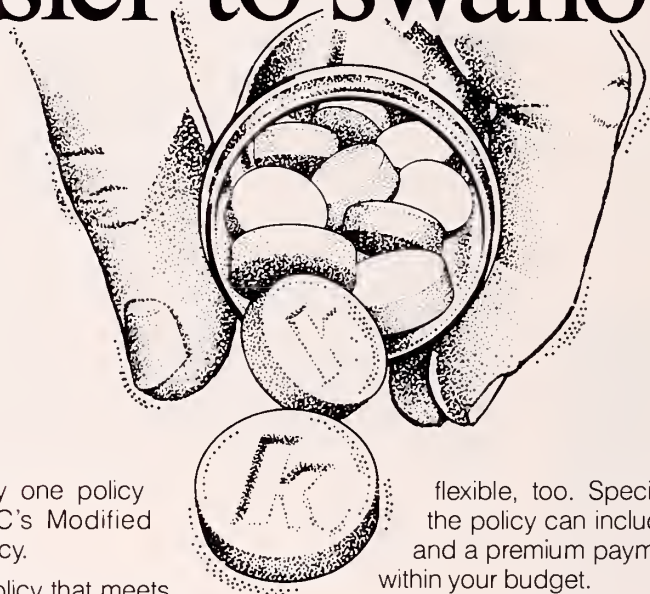
**Phyllis Cronin, past President of the Auxiliary to KMA, reported that money collected from last year's AMA-ERF contributions had been sent to Kentucky's medical schools. The University of Louisville received \$26,262.69 and the University of Kentucky was given \$15,463.11.**

Wally O. Montgomery, M.D., Chairman of the ad hoc committee on Professional Liability Insurance, reported that KMA's public relations firm, Wenz-Neeley, is preparing packets for distribution to legislators. He noted that the committee is considering legislative proposals to augment KMA's package for legislative reform recommended by the House of Delegates in 1986. The proposals include those offered by the Tort Reform Association of Kentucky and provisions adopted by other states regarding expert witness identification.

The next meeting of the Board of Trustees is scheduled for August 5 and 6.



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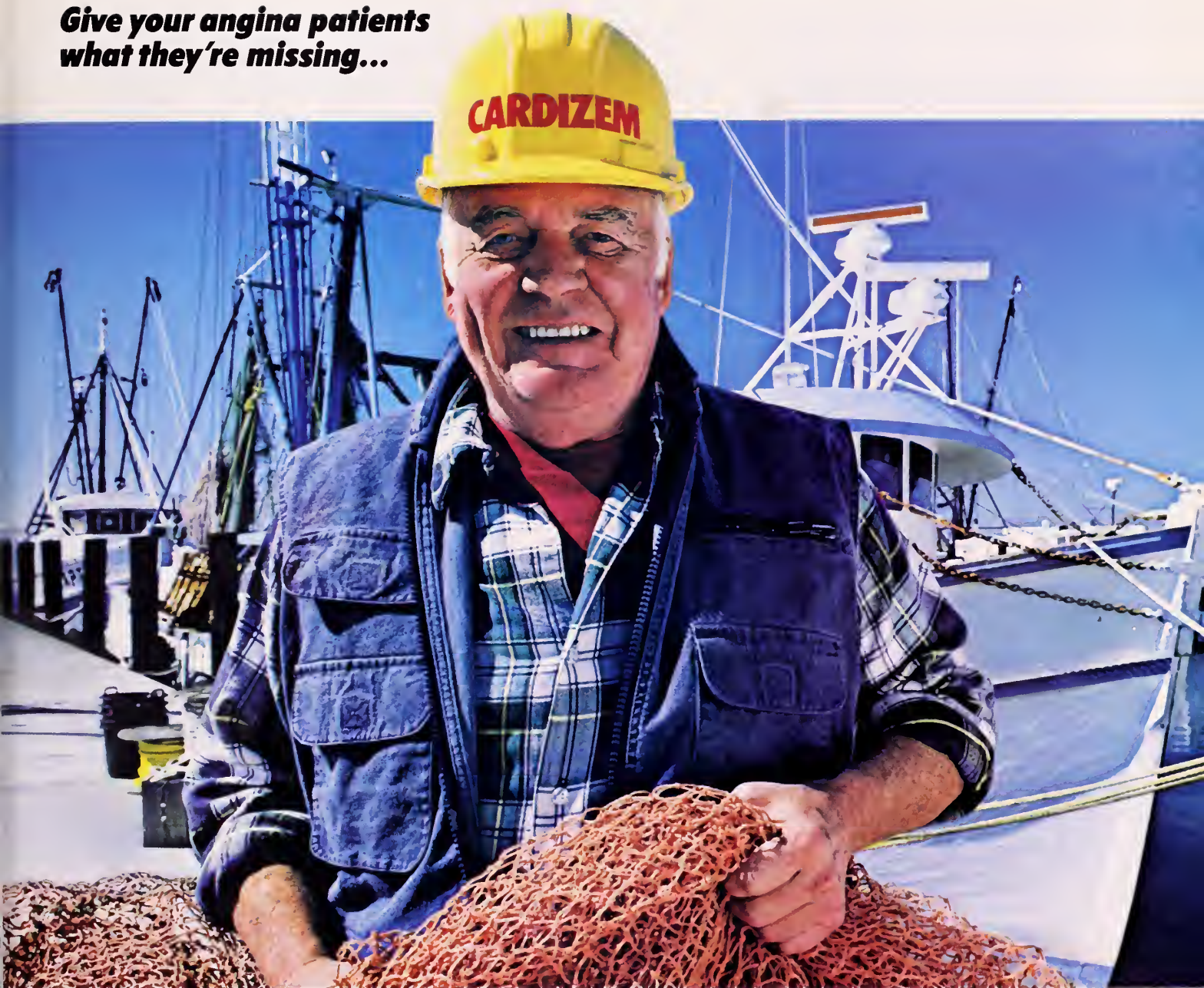
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- **A safe choice for angina patients with coexisting hypertension, asthma, COPD, or PVD<sup>4,5</sup>**

**\*See Warnings and Precautions.**

*Please see brief summary of prescribing information on the next page.*

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60 mg tid or qid

## Brief Summary

Professional Use Information

## CARDIZEM<sup>®</sup>

(diltiazem HCl) 30 mg and 60 mg Tablets

## CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

## WARNINGS

- Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
- Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
- Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
- Acute Hepatic Injury.** In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)

## PRECAUTIONS

**General.** CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic

function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes, however, these changes were reversible with continued dosing.

**Drug Interaction.** Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in *in vitro* bacterial tests. No intrinsic effect on fertility was observed in rats.

**Pregnancy.** Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (an mg/kg basis) than the daily recommended therapeutic dose has resulted in embryonic and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.

**Pediatric Use.** Safety and effectiveness in children have not been established.

## ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably asso-

ciated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	Angina, arrhythmia, AV block (first degree), AV block (second and third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.
Nervous System:	Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.
Gastrointestinal:	Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.
Dermatologic:	Petechiae, pruritus, photosensitivity, urticaria.
Other:	Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarthralgia, pain, polyuria, sexual difficulties.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

See complete Professional Use Information before prescribing. Issued 7/86

**References:** 1. Pepine CJ, Feldman RL, Hill JA, et al. Clinical outcome after treatment of rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. *Am Heart J* 1983; 106(6): 1341-1347. 2. Shapiro W. Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. *Consultant* 1984; 24(Dec): 150-159. 3. Jahnsson DL, Lesoway R, Humen DP, et al. Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. *Am J Cardiol* 1985; 55: 680-687. 4. Cohn PF, Braunwald E. Chronic ischemic heart disease, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. 5. Schroeder JS. Calcium and beta blockers in ischemic heart disease: When to use which. *Mod Med* 1982; 50(Sept): 94-116.

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# A Comprehensive Survey of Kentuckians Opinions Toward Medical Liability Insurance

The following report is based on the results of a public opinion survey of 596 adults who reside in Kentucky, commissioned by the Kentucky Medical Association. Hamilton, Frederick & Schneiders conducted telephone interviewing between February 27 and March 5, 1987.

The major objectives of the study were to:

- determine consumer attitudes toward health care delivery costs;
- determine consumer attitudes toward the legal system;
- determine consumer attitudes toward the insurance industry;
- determine consumer attitudes toward physicians;
- determine consumer awareness of and sensitivity to increases in medical malpractice insurance rates;
- identify support for reform of liability laws relating to health care costs in Kentucky; and
- identify support for a tax increase to provide health care for the indigent.

This is the written analytical report that analyzes all qualitative and quantitative data collected in this study. The report includes an executive summary called "Key Findings."

Throughout the report are single-spaced paragraphs labeled "Comment" that depart from strict data description and reflect Hamilton, Frederick & Schneiders' interpretations and reflections on the results.

Percentages in tables often may not add up to 100% due to rounding into whole percentage points. Similarly, subtotals may not agree with their components. For example, 8% "excel-

lent" and 42% "good" may add to different positive scores such as 49%, 50%, or 51%.

Findings throughout this report reflect a high degree of uniformity of responses across most subgroups. For this reason, data reporting omits descriptions of differences among subgroups, as in most cases little statistical significance is found in subgroup variations.

The *maximum* sampling error is plus or minus four points with 95% confidence.

The cross-tabular report, showing all survey results by key subgroups, has been delivered to the client.

As in all Hamilton, Frederick and Schneiders reports, we reserve the right in the event that any portion of this report is released to any public medium to make public the entire report and methodology to clarify the meaning of the released portion.

## Key Findings

- Most Kentuckians are both aware of and concerned about high medical malpractice insurance rates impacting the cost of health care. A majority blame increasing malpractice insurance rates as the major cause of physician fee increases.
- Kentuckians support a wide range of solutions to the medical liability problem. As consumers, they see themselves as the most adversely affected group as malpractice rates have risen, followed by physicians.
- A majority of Kentuckians blame the current legal system and its procedures for high malpractice rates. They feel the system en-

courages lawyers to file needless lawsuits and to demand higher settlements than justified.

- Kentuckians strongly support changes in the legal system to correct its ills. Specifically, they favor barring attorneys from basing their legal fees on a percentage amount of a suit award, and favor enacting a maximum cap of \$250,000 on jury awards for punitive or non-economic damages.
- The majority of Kentuckians feel that Kentucky insurance companies have raised malpractice coverage rates in response to the cost of providing this coverage, not a desire for profits. Kentuckians overwhelmingly favor legislation to limit liability rate increases in order to stop this cost escalation.
- Kentuckians have an extremely high opinion of Kentucky physicians, and see physicians akin to themselves as victims of increasing health care cost.

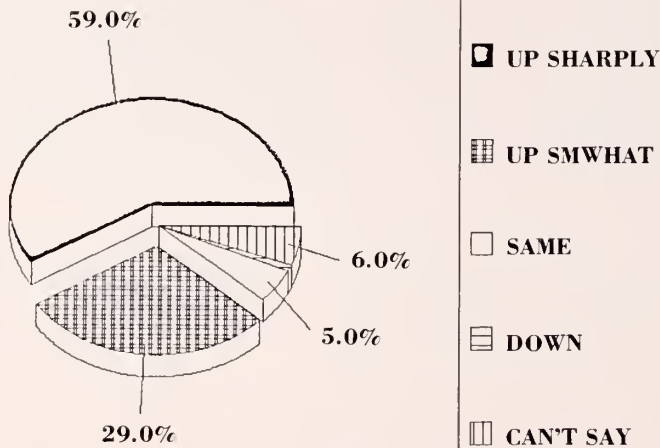
## Opinions Related to Health Care Costs and the Role of Medical Malpractice Insurance

When asked to name the biggest problems facing Kentucky today, Kentuckians mention **lack of jobs** (74%), and a **poor education system** (50%) as top concerns. One-third of Kentuckians (33%) mention **high health care costs** as a major problem facing the state, a more pronounced concern than roads and highways (19%) and high crime (17%) among Kentuckians.

**Kentuckians view rising health care costs (84%) as a bigger health care problem than either**



GRAPH ONE  
HEALTH CARE COSTS GONE DOWN/STAYED  
SAME/GONE UP?



finding good quality care (6%) or being able to access varying types of health care (7%). High health care cost is the major family health care concern with these Kentuckians, not quality or accessibility. **Kentuckians perceive a recent upward spiral in health care costs; 88% feel the cost of health care has risen over the past few years, and a majority (59%) perceive a sharp rather than gradual increase in these costs (Graph 1).**

Kentuckians do not uniformly assign blame to any one group or entity for rising health care costs. Respondents aware of rising costs volunteer a variety of groups as most responsible for cost escalation, including physicians (23%), insurance companies (16%), malpractice suits (12%), hospitals (12%), the government (12%), and general economic factors (9%).

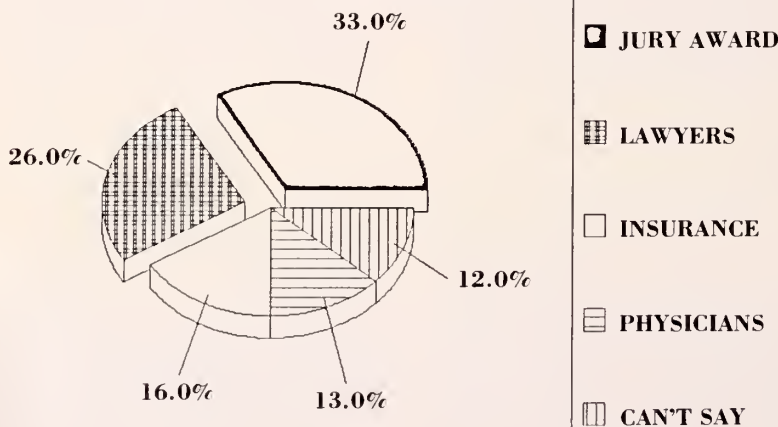
*Comment: Most Kentuckians are acutely aware of and sensitive to rising health care costs, but have not yet in full laid blame on any one group for cost escalations.*

**Two out of three Kentuckians (65%) claim to be familiar with the problem of increasing medical malpractice liability insurance costs, and a majority (56%) initially feel it is serious enough to take action to stop these rising costs.**

*Comment: Respondents indicate awareness of both the liability crisis and its seriousness. They are cognizant of its impact on the overall cost of health care delivery in Kentucky.*

The majority of Kentuckians specifically hold both “outrageous court settlements that pay too much money” (33%) and “greedy lawyers who file too many unnecessary lawsuits” (26%) accountable for the high level of medical malpractice rates today (Graph 2). Fewer than a third of Kentuckians hold either physicians (13%) or insurance companies (16%) responsible.

GRAPH TWO  
MOST TO BLAME FOR HIGH  
MALPRACTICE RATES



## ASSOCIATION

*Comment: Clearly respondents hold lawyers and the legal system responsible for the problem of high medical malpractice rates which raise the overall cost of health care. As will be shown, these health care consumers favor actions to stop the upward pressure on malpractice rates and, in turn, the cost of health care delivery.*

### Opinions of Various Professions and the Impact of Liability Insurance on Groups

Kentuckians have highly favorable opinions of both Kentucky physicians (75% to 15% favorable) and hospitals (73% to 17% favorable). Kentuckians hold physicians in higher regard than other groups tested (Table 1). A majority of Kentuckians have favorable opinions of both judges (60% to 12%) and lawyers (52% to 24%); however, these two groups are not accorded quite the level of favorability given to physicians (75%) and hospitals (73%). A lean majority of Kentuckians (52%) rate the state's insurance industry favorably; one-out-of-three respondents have an unfavorable opinion of insurance companies. Politicians score a net negative rating, 44% unfavorable to 33% favorable among Kentuckians.

*Comment: Consumers hold the medical profession and its practitioners in very high regard, even more so than judges in the legal system. A bare majority have a favorable opinion of either attorneys or insurance companies.*

Kentuckians feel that consumers (ie, themselves) are the group hardest hit by the problem of rising medical malpractice insurance rates — 88% feel they are hurt by these rising costs, with 59% feeling “hurt a lot” (Table 1).

Kentuckians see physicians (69% — “hurt”), corporations (68%), and state and local governments (63%) as

**TABLE 1**  
**FAVORABILITY OF GROUPS/ WHO**  
**COST OF LIABILITY INSURANCE HAS**  
**HURT THE MOST**

	Favorable %	Unfavorable %
<b>Favorability</b>		
<u>Ratings</u>		
Physicians	75	15
Hospitals	73	17
Judges	60	12
Lawyers	52	24
Insurance Companies	52	33
Politicians	33	44
	Total Hurt %	Hurt A Lot %
<b>Who has cost of liability insurance hurt the most?</b>		
Consumers	88	59
Physicians	69	33
Corporations	68	23
State and Local Government	63	22
Insurance Companies	56	18
Lawyers	51	10

seriously impacted by these escalating costs, but not being nearly as intensely affected as consumers.

In contrast, few Kentuckians feel lawyers and insurance companies are suffering — only 10% and 18%, respectively, feel these two groups are “hurt a lot” by high malpractice insurance rates.

*Comment: An “us vs. them” mentality is evident in these findings — consumers place themselves at the bottom of the totem pole, as the biggest losers because of high rates. It is important to note that physicians are the closest “allies” of the consumer of all groups tested in terms of perceived damage suffered.*

**TABLE 2**  
**PERCEPTIONS OF LEGAL SYSTEM**  
**PROBLEMS**

	Total %
<u>The court system in America today is too slow.</u>	
Agree	81
Disagree	11
Strongly Agree	49
<u>There are too many unnecessary lawsuits filed these days.</u>	
Agree	84
Disagree	7
Strongly Agree	62
<u>Lawyers should not be allowed to base their fees on the size of the amount in the suit. This encourages lawyers to file more lawsuits and for bigger rewards than are justified.</u>	
Agree	81
Disagree	13
Strongly Agree	58

### Attitudes Toward the Legal System and Tort Reform Proposals

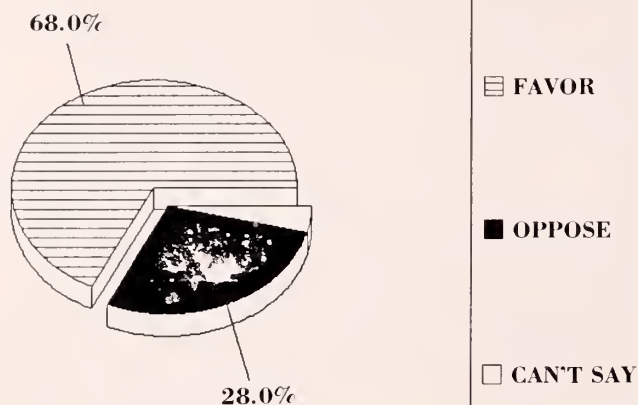
Kentuckians give a divided assessment of the legal system's performance, 49% positive to 48% negative. More intensity of feeling exists on the negative side (19% rate the system “poor”) than on the positive end (only 3% “excellent”).

How well does the legal system work today?	%
Excellent	3
Good	46
Not So Good	29
Poor	19

Respondents who are critical of the legal system's operation blame lawyers (23%), politicians and the government (19%), judges (12%), and the system as an institution which has been corrupted (10%) for the legal system's failures.



**GRAPH THREE**  
**FAVOR/OPPOSE SLIGHT TAX INCREASE**  
**FOR INDIGENT CARE**



Although half of Kentuckians rate the legal system's overall performance as negative, more than four out of five respondents are quick to find faults in the system. A monolithic 81% of Kentuckians agree the court system in America is too slow, and 84% agree there are too many unnecessary lawsuits being filed (Table 2).

While giving lawyers a favorable opinion overall, Kentuckians do hold lawyers accountable to some degree for the legal system's ills: 81% of respondents mandate that lawyers should not be allowed to base their fees on the size of suit amounts, as they feel this encourages lawyers to file more lawsuits and to seek larger amounts than are justified by the circumstances involved.

*Comment: It is accurate to say that a majority of Kentuckians see the legal system as fraught with problems, and see serious abuse of the system. Kentuckians feel that lawyers, if not the source of the problem, are exacerbating the already plagued legal system. These Kentuckians want to install more checks in*

*the system to prevent and halt further system abuse.*

Respondents accept two proposed remedies for improving the legal system. First, Kentuckians favor by more than four to one enacting a law to make out-of-court settlements on lawsuits easier (75% to 18%), addressing the concern that the court system is too slow due to excessive litigation. Second, respondents favor 57% to 36% enacting legislation to prohibit lawyers from expressing their fee amounts as a percentage of a client's suit award.

*Comment: Kentuckians support the principle of making adjustments to the legal system and restoring checks on its operation. They blame legal tactics and current fee determination methods for excessive litigation they see plaguing the court system today.*

**Kentuckians want to solve the problem of health care cost escalation through altering current legal system procedures.**

Respondents see several vehicles as viable methods for accomplishing this

agenda. Kentuckians favor 60% to 30%, or by a two-to-one margin, enacting limits for punitive damages that a jury can award (Table 3). **More specifically, Kentuckians favor by 64% to 30% passing legislation that places a maximum cap of \$250,000 on the amount of punitive damages that can be awarded due to injury.** As for the support of this, a monolithic 86% of Kentuckians agree that "if a person can recover 100% of their economic loss, there should be some limit on how much they can sue for emotional pain and suffering, because lawyers usually push for more than is justified."

*Comment: Kentuckians support the principle of limiting punitive damage amounts, and a proposed cap of \$250,000 is considered a reasonable measure to achieve this end.*

Kentuckians want to reserve "the right to sue a doctor if we feel something is wrong," but agree that "we also need to stop the outrageous amounts of money some people get in personal injury cases" (88% to 9%). Further, Kentuckians agree 86% to 9% that "I'd support laws to lower doctors' medical malpractice insurance rates if doctors would pledge to pass their cost savings along to patients."

**Kentuckians demand legislative action on this tort reform issue.** Kentuckians want the Kentucky Legislature to take action that lowers the cost of medical malpractice insurance physicians must pay — 80% want this legislation to be one of the **major** priorities in the next legislative session. Kentuckians feel strongly about this issue; 44% agree they would vote **against** their state legislator if he or she did not support efforts to lower malpractice rates.

*Comment: Kentuckians are consistent in their views relative to the liability insurance system and the legal process. They blame lawyers and the legal*

process for causing much of the problem with rising liability insurance costs. They support a wide range of **reforms** from promoting out-of-court settlements to limiting lawyers fees and awards for punitive damages. And, they express a desire to have the legislature **do something** about the issues.

### Attitudes Toward the Insurance Industry

Kentuckians narrowly rate the Kentucky insurance industry's performance positive 50% to 43% on "providing a good product at a fair price" (Table 4), with more intensity on the negative side (17% "poor" rating) than on the positive end (only 7% "excellent" rating). This compares only slightly more favorably than Kentuckians view of the legal system (49% to 48%).

Somewhat of a surprise, given the marginal credibility insurance companies initially appear to possess, **is the concession by Kentuckians that insurance companies raise their coverage rates more in response to higher coverage provision costs (51%) than out of a motivation for bigger profits (39%)** — the insurance industry is the beneficiary of doubt here.

Yet, Kentuckians do not entirely trust insurance companies to be self-regulating on coverage rates, particularly given their high level of concern about increasing malpractice rates: they favor, by a huge 84% to 12% margin, regulating by law the amount these liability insurance rates can increase from year to year, with 68% **strongly** favoring this action.

*Comment: Again, consumers see themselves as most threatened by the liability crisis, and favor measures to protect themselves and physicians from further cost escalations. Surprisingly, consumers on the whole do **not** hold*

TABLE 3  
TORT REFORM ACTION FAVORED

	Total %
Putting a limit on how much the jury can award an injured person in non-economic or punitive damages.	
Favor	60
Oppose	30
Can't Say	10
Passing a law which allows full economic damages but limits punitive damages for "pain and suffering" to a \$250,000 maximum.	
Favor	64
Oppose	30
Can't Say	6

*insurance companies accountable for high malpractice rates.*

### Attitudes Toward Kentucky Physicians

More Kentuckians rate Kentucky physician performance as positive on **providing good quality care (82% positive)** and on **caring about their patients (78% positive)** than give these physicians a favorable rating (75%) (Table 5). Within the context of profession practice, Kentuckians hold physicians in very high esteem.

**Kentuckians rate physician performance on controlling costs negative 60% to 36%.** At first blush, it appears that respondents attribute rising costs directly to physicians; this is not the case. As shown by previous data on physician favorability and parties perceived responsible for rising costs (only 23% of the 88% who feel costs have risen blame physicians), this perception is obviously not detrimental to the image Kentuckians hold of physicians.

**The majority of Kentucky consumers blame increasing medical malpractice insurance rates (52%) for increases in physician patient fees.** Fewer than a quarter of respondents (24%) feel increased physician

TABLE 4  
JOB PERFORMANCE RATING OF INSURANCE INDUSTRY IN KENTUCKY

	Total %
Overall, how would you rate the insurance industry for providing a good product at a fair price?	
Excellent	7
Good	43
Not So Good	26
Poor	17
Can't Rate	6
Total Positive	50
Total Negative	43

fees are caused by physicians who "just want to make more money," and one in eight Kentuckians (15%) credit the number of new and costly medical treatments as primarily responsible for increases in physician patient charges.

Confirming this finding, respondents agree 78% to 17% that "doctors are being forced to practice defensive medicine these days to avoid lawsuits; this only adds to the cost of care, not the quality of care."

*Comment: Physicians obviously enjoy high professional credibility. Consistent with data reported earlier, physicians are seen as "passing thru" increased costs. Consumers are on the physicians' side in the tort reform battle.*

### Indigent Care Tax Proposal

Nine out of 10 Kentuckians (89%) agree that state government "Has a responsibility to make health care available to people who cannot afford it." A lesser number but substantial amount of Kentuckians (69%) feel that state government should finance health care costs for the indigent.



TABLE 5  
PERFORMANCE RATINGS OF KENTUCKY PHYSICIANS

	Total %
<b>Providing Good Quality of Care</b>	
Positive	82
Negative	14
Can't Rate	4
<b>Caring About Their Patients</b>	
Positive	78
Negative	19
Can't Rate	3
<b>Keeping Their Costs Down</b>	
Positive	36
Negative	60
Can't Rate	4

By greater than two to one, respondents favor 68% to 28% a slight increase in state taxes (via sales tax or property tax) to pay for indigent health care (Graph 3).

*Comment: Kentuckians, aware of their own plight in the health care cost spiral, are cognizant of the even greater difficulties this must pose for Kentuckians less fortunate than themselves, and favor even a tax increase to ensure health care is available for the indigent in the state.*

### A Caveat

Kentuckians think highly of physicians overall and in particular in the context of profession practice. However, this credibility is not instantaneously translatable over to the public policy and political arena; Kentuckians rate physician performance on "being believable when talking about public policies and political issues" positive by only an 8-point margin, 43% to 35%, with 22% not giving an opinion.

This simply means that physician credibility is not automatically extendable out of the sphere of profession practice into the sphere of politics, but does not imply insurmountable barriers to overcoming this initial lack of credibility galvanization on the political front for physicians.

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**Indications:** Management of anxiety disorders; short-term relief of anxiety symptoms, acute alcohol withdrawal symptoms, preoperative apprehension and anxiety. Usually not required for anxiety or tension associated with stress of everyday life. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment at therapy recommended.

**Contraindications:** Known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms (including convulsions) reported after abrupt cessation of extended use of excessive doses are similar to those seen with barbiturates. Milder symptoms reported infrequently when continuous therapy is abruptly ended. Avoid abrupt discontinuation; gradually taper dosage.

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Due to isolated reports of exacerbation, use with caution in patients with porphyria.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. **Oral—Adults.** Mild and moderate anxiety disorders and symptoms, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. **Geriatric patients:** 5 mg b.i.d. to q.i.d. (See Precautions.)

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Physician Manpower Committee. Robert R. Goodin, M.D., chairman at head of table.

### *Committees*

At its meeting on March 25, the Physician Manpower Committee continued its review of maldistribution and a possible future excess of physicians in the state. Various methods of study of these issues were considered that had been developed in other states. The committee is being assisted by the Council on Higher Education, the Cabinet for Human Resources and both medical schools. A critical factor that has been defined is quantifying medical need versus medical demand.

---

### *Members*

Harold D. Haller, Sr., M.D. was named Citizen Doctor of the Year by the Kentucky Academy of Family Physicians during the 36th Annual Scientific Assembly. Doctor Haller was chosen for the award for his contributions to the Academy, the KMA and AMA and to his community. He is a 1965 graduate of the Bowman Gray School of Medicine and has been a member of KMA since 1965.



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Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

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- Significantly faster relief—62% of total four-week improvement evident in first week versus 44% with amitriptyline alone<sup>1</sup>
- Dramatic first-week reduction in somatic complaints<sup>2</sup>

## % Reduction in Somatic Symptoms<sup>2</sup>

Vomiting	Nausea	Headache	Anorexia	Constipation
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- Only 1/3 the dropout rate due to side effects of amitriptyline alone, although the incidence of side effects is similar<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

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## In moderate depression and anxiety

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References: 1. Feighner JP, et al. *Psychopharmacology* 61: 217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

### Limbitrol<sup>®</sup> <sup>IV</sup>

#### Tranquillizer—Antidepressant

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Relief of moderate to severe depression associated with moderate to severe anxiety

**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

**Warnings:** Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

**Precautions:** Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated, sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

**Adverse Reactions:** Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring

reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

**Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

**Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

**Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

**Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

**Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

**Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

**Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

**Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

**Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Overdosage:** Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**Dosage:** Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol DS (double strength) Tablets, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol Tablets, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500, Tel-E-Dose<sup>®</sup> packages of 100, Prescription Paks of 50.



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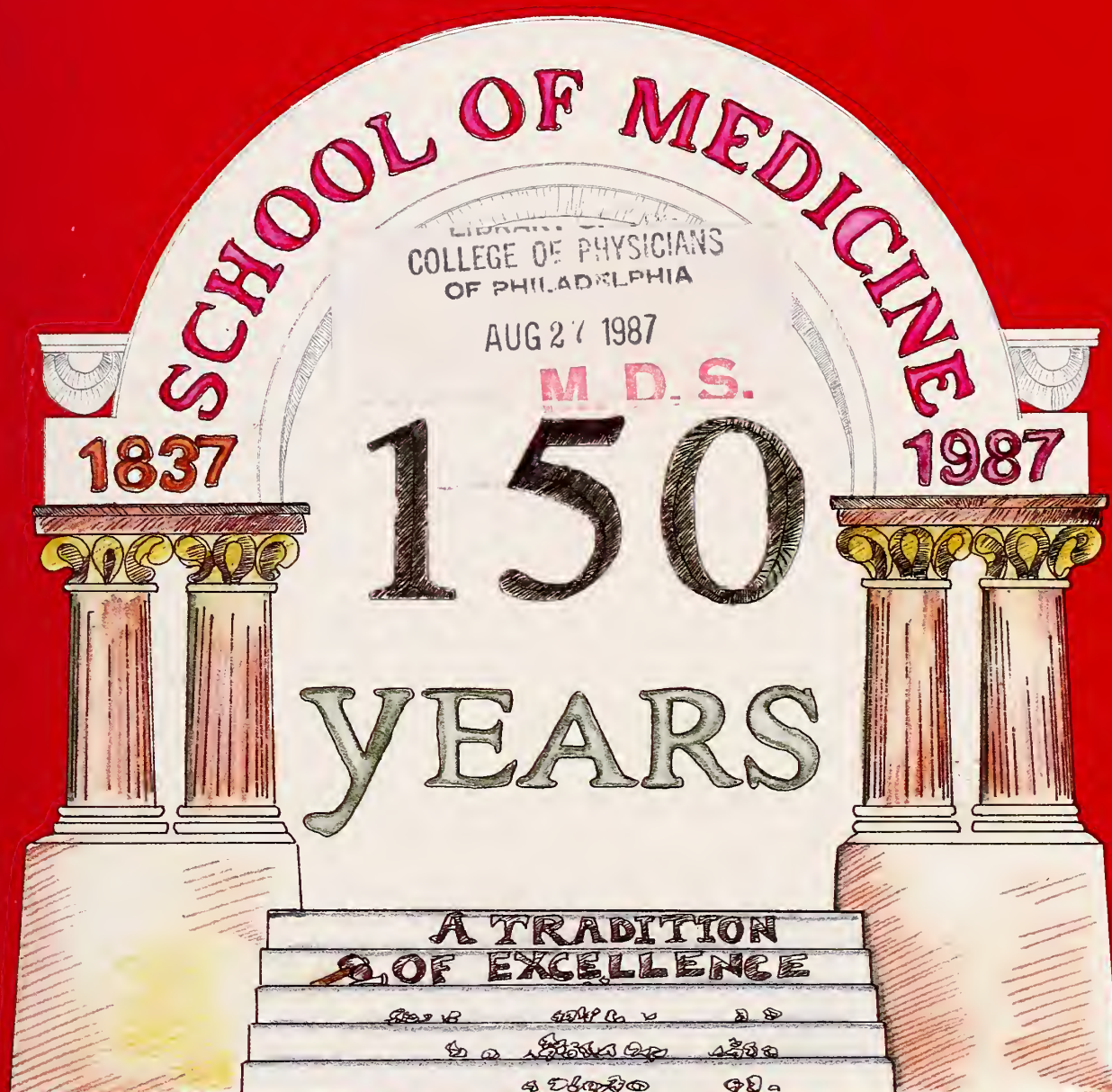
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Volume 85, Number 8

August 1987



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# Opportunity, The Peach or the Pits

**G**et a group of Kentucky doctors talking, at a party or here in the *Journal*, and what are you likely to hear? Gloom and doom on a massive scale—the malpractice crisis, DRGs, HMOs, PPOs, too many doctors, licensing problems, third-party interference. If these are causing you concern, anxiety, palpitations, chest pain and other forms of professional stress, you are a fairly typical Kentucky MD.

Now, some concern is understandable. And healthy. We need to be aware of the problems confronting our profession. But before we let alarm over our problems damage our image and self-esteem, and hamper our ability to protect our patients' well-being, let's look at the whole picture and see the peach as well as the pits.

Do we have cause for concern? Of course. But cause for alarm? No.

Kentucky is blessed with a corps of well-trained, high-caliber, dedicated physicians who have demonstrated their ability to meet changes and challenges and still improve the quality of their service. Let's keep one fact in mind: Every one of these challenges, every problem we face, also represents an opportunity. Let's take a look at some of the common complaints and most frequently-expressed worries that we hear:

1. Kentucky is a poor state trying to support two medical schools. True. But it is a great advantage to both doctors and patients to have two excellent medical schools with people and facilities capable of giving our citizens medical care comparable to that available to the people of any state in the Union. It is up to us to coordinate the personnel and facilities of both of these fine schools, and to cooperate in using both and in encouraging the state to support both to their full potential.

2. This is a small, poor state in which to practice modern medicine. True, but in a very limited sense. There is also a real advantage in practicing in a small state where medical advances can be rapidly disseminated throughout the physician population, making possible rapid delivery of up-to-the-minute health care.

3. Indigent care is a particularly heavy burden in a poor state. To a degree, true. But consider the fine record of indigent medical care that Doctor Russell Travis has headed up on behalf of the KMA to make sure that no one "falls through the cracks" in our delivery system. Those who have participated in this plan have found patient distribution to be equitable, and have taken health care to countless people who would otherwise

have had extreme difficulty in taking care of their illnesses.

4. Kentucky stands 39th among the 50 states in infant mortality. True, sad to say. But this presents us with a tremendous opportunity for improvement. With the kind of effort we have shown in other areas of medical care, we can also produce the highest rate of decrease of any state in the Union. This field really offers an exciting challenge.

5. Do we really need two cancer centers: the McDowell Center in Lexington, the Brown Center in Louisville? Well, look at it this way: With the coordination and cooperation that is developing between the two centers, we have twice the opportunity for advances in this critical area. For example, with proper use of these facilities, we should be able within a short time to show the greatest decrease in breast cancer of any state.

6. Outmoded county health departments give us a weak health-care infrastructure. It is true that state government, responding to county pressures, has been reluctant to consolidate health services along lines of administrative efficiency and economy rather than political lines, and many of the existing county health departments are small, under-funded and lacking in personnel. But we can per-



## President's Page

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form a valuable service by showing how the regional coordination of personnel and facilities can improve medical care and save money without interfering with local control, and by encouraging such coordination and cooperation whenever possible.

These are very real problems. But while we are considering them, let's not overlook our accomplishments. Everyone is aware of our progress in open-heart surgery, which can now be performed in Louisville, Lexington, Madisonville, Covington, and Paducah—an impressive showing for a

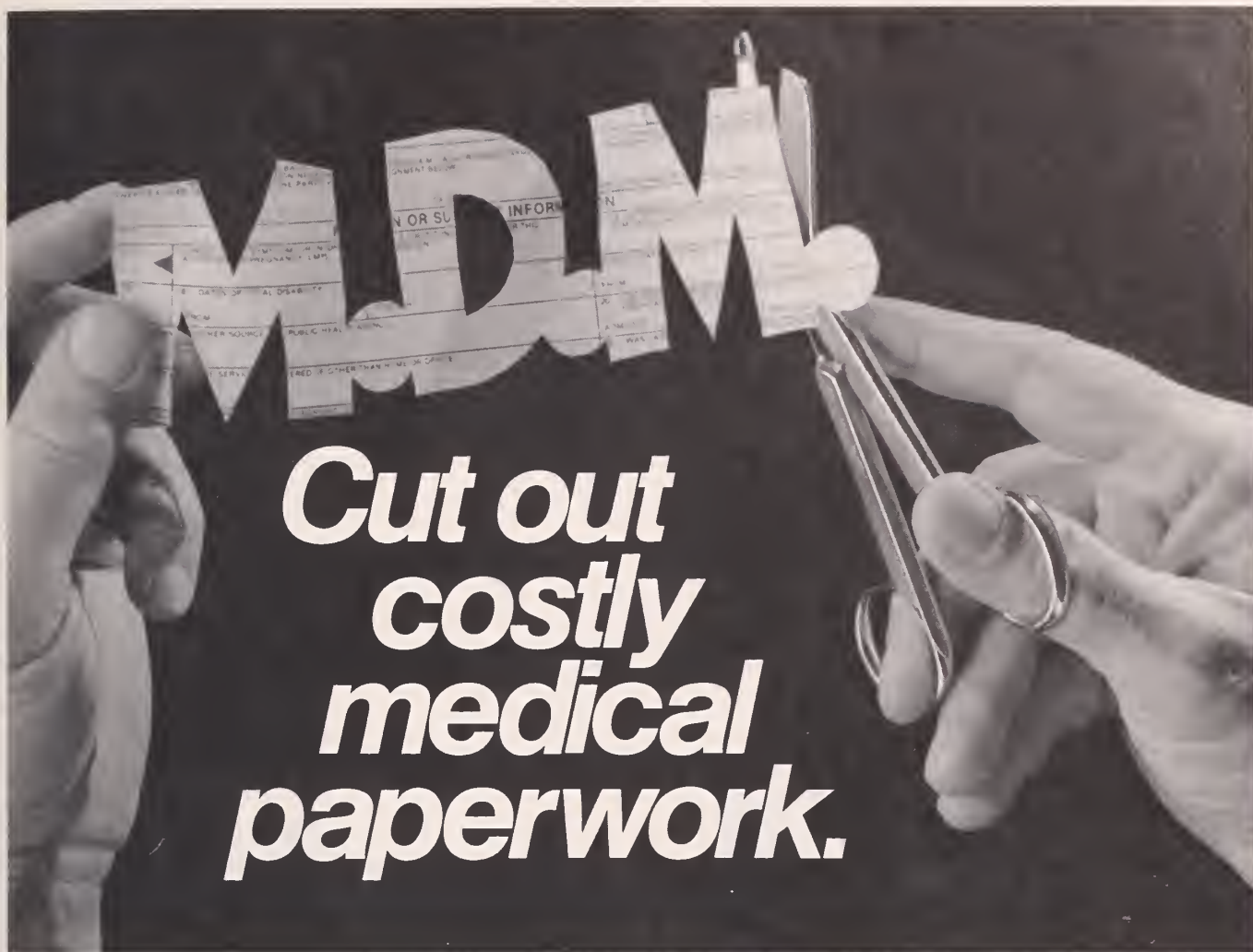
small state. These facilities have enabled us to decrease the number of cardiac deaths in Kentucky, and we can look forward to an even more gratifying decrease.

Kentucky's program of medical licensure is another reason for gratification. Because of it we are able to police our profession better than ever before, easing licensing procedures for qualified physicians and making it possible to eliminate MDs who do not measure up.

But the list of both accomplishments and opportunities is too long to

demand detailing here. The reassuring point is that opportunities DO exist. Doctors CAN make a difference. We are probably the most highly-educated segment of the Kentucky population. We enjoy public confidence, and we are equipped financially and by the nature of our training to lead this effort for health-service improvement. We face an exciting prospect if we stop bemoaning our problems and start tackling them.

**Thomas R. Watson, M.D.**  
**KMA Vice President**



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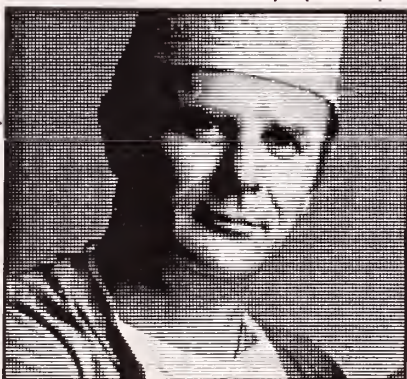
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To show you how many  
hypertensives stayed on

**INDERAL<sup>®</sup> LA**  
(PROPRANOLOL HCl)

after a major nationwide trial...





An aerial photograph of a large, modern stadium filled with spectators. The stadium is illuminated by bright lights, and the football field is visible in the center. The surrounding area includes parking lots, roads, and distant hills under a twilight sky. The text "...we had to find just the right room." is overlaid in the upper center of the image.

...we had  
to find  
just the  
right room.



# 60,073 patients (90%) who started on INDERAL LA stayed on INDERAL LA!<sup>1\*</sup>

---

## Surprising? Not really.

Because most patients on INDERAL LA (propranolol HCl) don't even know it's working.

A recent double-blind, placebo-controlled, crossover study in 138 hypertensive patients<sup>2</sup> revealed that INDERAL LA has a side effects profile unsurpassed by atenolol or metoprolol — which shows how well-tolerated once-daily INDERAL LA can be.

## Sole therapy or concomitant therapy?

**Fifty-nine percent of the time, INDERAL LA stood on its own.**

The patients in the nationwide compliance trial were no different from yours. Generally when the antihypertensive regimen is complicated, compliance may become a problem. So, the effectiveness of INDERAL LA as once-daily monotherapy is a big plus. Of the remaining hypertensives in the program, 36% were treated merely with the addition of a diuretic to INDERAL LA.

## For the noncompliant patients in your practice, INDERAL LA may well be the answer.

Almost 20,000 of the patients in the nationwide compliance trial were identified as having been noncompliant with their previous antihypertensive therapy. Their physicians reported that 88% showed improved compliance when placed on once-daily INDERAL LA.

---

## Control, comfort, and compliance

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**INDERAL<sup>®</sup> LA**  
(PROPRANOLOL HCl) LONG ACTING CAPSULES

Like conventional INDERAL Tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma.

\*After a 30-day trial with INDERAL LA, physicians reported that 90% of the patients would remain on INDERAL LA.

**The one you know best  
keeps looking better**

Please see next page for brief summary of prescribing information.

N O W A V A I L A B L E...  
NEW LOW DOSE  
**INDERAL<sup>®</sup> LA 60 mg**  
(PROPRANOLOL HCl) LONG ACTING CAPSULES



# The one you know best keeps looking better

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR)

## INDERAL® LA brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing neither autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

Inderal LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

Inderal LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE. Hypertension:** Inderal LA is indicated in the management of hypertension. It may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first-degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS. CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can in some cases lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely. Inderal should be discontinued (gradually if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it is usually advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)**—PATIENTS WITH BRONCHOSPASTIC DYSASTHESIA SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Inderal (propranolol HCl) like other beta blockers is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOGLYCEMIA.** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing T<sub>4</sub> and reverse T<sub>3</sub> and decreasing T<sub>3</sub>.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case, this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS. GENERAL.** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should

be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**CLINICAL LABORATORY TESTS.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenyltol, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected T<sub>3</sub> concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY.** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS.** Inderal is excreted in human milk. Caution should be exercised when Inderal (propranolol HCl) is administered to a nursing woman.

**PEDIATRIC USE.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular.** Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

**Central Nervous System.** Light-headedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, vivid dreams, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy and vivid dreams appear dose related.

**Gastrointestinal.** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic.** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory.** Bronchospasm.

**Hematologic.** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-Immune.** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous.** Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSEAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION.** Dosage must be individualized. The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosages is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS.** Dosage must be individualized. Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE.** Dosage must be individualized. The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS.**—80-160 mg Inderal LA once daily.

**PEDIATRIC DOSEAGE.**—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. Inderal LA National Compliance Evaluation Program. Data on file. Ayerst Laboratories.
2. Ravid M, Lang R, Jutrin J. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985; 145:1321-1323.

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# Trauma Associated with the Use of All-Terrain Vehicles

## Complete Spectrum of a National Epidemic in Rural Western Kentucky

Charles B. Ross, M.D., Halden H. Ford, Eric C. Brown, M.D., Louis G. Forte, M.D., Andrew W. Porter, M.D., Carroll W. Traylor, M.D., and Paul W. Schaper, M.D., F.A.C.S.

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*Trauma from the recreational use of all-terrain vehicles (ATVs) has been recognized as a national epidemic. Patients injured in ATV-related accidents in 1986 who presented to the Marshall County Hospital Emergency Department were studied to determine a wide range of variables relating to their accidents, types of injuries sustained, hospital costs, and degree of injury-related disability. Fifty-one patients were injured in 48 accidents. The age and sex distribution of accident victims was heavily skewed toward preadolescent and adolescent males. Only 24% of accident victims were wearing protective helmets. Nine accidents involved four-wheeler ATVs and 39 involved three-wheelers. The most common mechanisms initiating accidents were flipping and rollover of vehicles. Accidents happened on all types of terrain and with ATVs of all sizes. Most common injuries were contusions and abrasions, fractures, and head injuries. Ninety percent of all victims sustained some degree of temporary partial disability from their accidents. One patient's injuries left him permanently impaired. More severe injuries tended to occur in younger patients. Suggestions are made for possible intervention strategies, and a plea is rendered for the active involvement of Kentucky primary care physicians and surgeons in addressing this problem in Kentucky.*

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*From the Emergency Department, Marshall County Hospital, Benton, Kentucky, and the Department of Surgery,<sup>1</sup> Vanderbilt University Medical Center, Nashville, Tennessee. Reprint requests to: Charles B. Ross, M.D., Department of Surgery, T-2116 MCN, Vanderbilt University Medical Center, Nashville, TN 37232.*

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All-terrain vehicles (ATVs), commonly known as "three-wheelers" and "four-wheelers," were introduced into the United States in 1971.<sup>1</sup> and because they are both fun to ride and versatile in their potential uses, ATVs have achieved great popularity. ATVs now account for approximately half of the total motorcycle-type sales market, with an estimated 2.3 million vehicles in use at the end of 1986.<sup>2</sup> As the popularity of ATVs has increased, so have the number of ATV-related injuries and deaths. In 1982, an estimated 8,600 people were injured in ATV accidents and 26 died, whereas in 1985, an estimated 85,900 injuries occurred resulting in 238 fatalities.<sup>2</sup> The lay media, medical profession and United States Consumer Product Safety Commission (CPSC) have recognized ATV-related trauma as an "epidemic."<sup>2-6</sup>

Kentucky, especially the lakeland area of Western Kentucky where outdoor recreational opportunities abound, has followed the national trend. A review of the emergency department (ED) log at Marshall County Hospital (MCH) revealed two entries specifically listed as "three-wheeler" accidents in 1981, but that number increased to 30 in 1985. These numbers may be artificially low due to miscoding; however, physicians in the county noted similar increases in the number of accident victims with minor injuries who presented directly to their private offices for evaluation and treatment. Whereas reports from tertiary referral centers show high degrees of morbidity and mortality from ATV-related trauma,<sup>1,7,8</sup> it is our perception that such studies reflect merely the "tip of the iceberg." The present study was undertaken to document ATV-related injuries over a 12-month period in 1986 presenting for treatment to the MCH-ED. The circumstances and



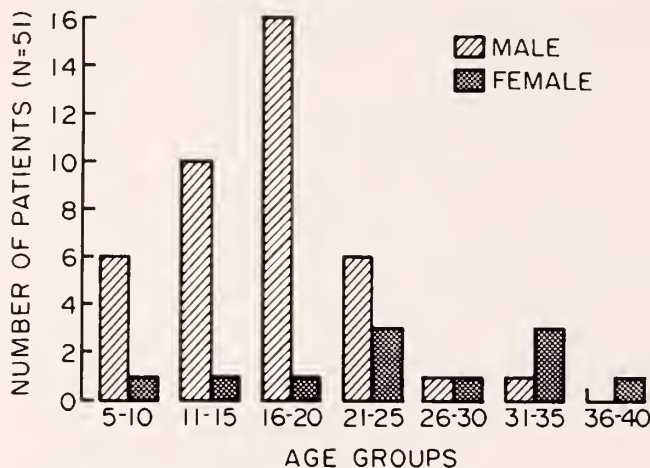


Fig. 1: Age and sex distribution of patients.

mechanisms of each accident, injury-related disability, and hospital costs were studied to provide an understanding of the scope of the ATV problem in both physical and economic terms in a rural Kentucky community and to direct strategies for intervention.

### Methods

Emergency department records and hospital charts of all patients who presented to Marshall County Hospital following injuries sustained while driving or riding an ATV between January 1, 1986, and December 31, 1986, were reviewed. Cases which occurred prior to July 1, 1986, were reviewed retrospectively, whereas those occurring after this date were followed prospectively. Charts were reviewed to determine the following data on each patient: age and sex, date of injury, mechanism of injury, terrain on which the injury occurred, whether a protective helmet was worn, type of ATV, *e.g.*, three-wheeler versus four-wheeler, whether patient was driver or passenger, whether alcohol was involved, whether the accident was recreational or work-related, all documented injuries, diagnostic evaluation and treatment rendered, radiologic confirmation of injuries, and disposition. Information on patients transferred to another hospital was obtained by interview of patients and/or immediate family members and by interview of the patient's attending physician at the referral institution.

Follow-up information was obtained by telephone interview and by questionnaires mailed to all patients. Included in the questionnaire were inquiries regarding the type of ATV and size of engine (cc H<sub>2</sub>O displacement), rider experience, safety instruction, estimated speed at time of accident, and number of school or work

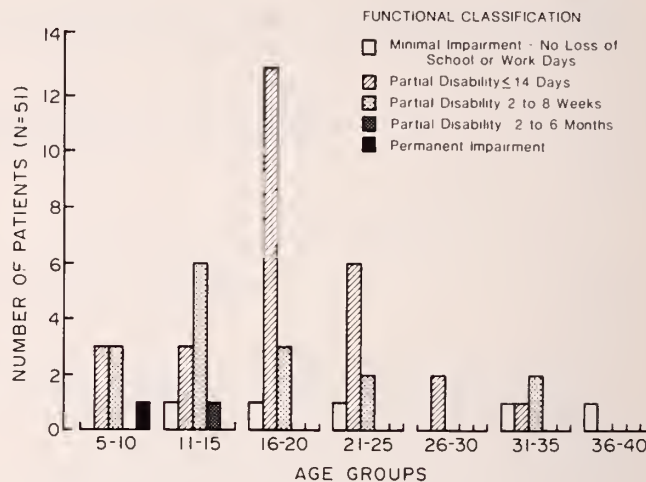


Fig. 2: Functional classification detailing the degree of disability due to injury by age group.

days missed due to the accident. All follow-up information was obtained by the same physician (Ross) so that, by using information from all of the above sources, as complete a data base as possible could be consistently developed on every accident. Financial information, restricted only to total hospital bill, was obtained through the MCH accounting office.

Injury Severity Scores (ISS) are derived from the Abbreviated Injury Scale (AIS) which is periodically revised by the American Association for Automotive Medicine.<sup>9</sup> The ISS is used to classify injuries on the basis of confirmed anatomic diagnosis. Calculation and use of the ISS is thoroughly reviewed elsewhere.<sup>10,11</sup> The ISS correlates well with length of hospital stay and mortality, but subsequent morbidity and disability due to injuries requiring hospitalization do not appear to correlate well with the ISS.<sup>12,13</sup> The ISS is not employed to describe injuries managed on an outpatient basis. The ISS was calculated for all patients in this study who required hospitalization. Additionally, a functional classification was developed to describe the degree of impairment and duration of disability for all patients. This classification consisted of the five following groups: minimal impairment—no school or work days missed, partial disability up to 14 days in duration, partial disability lasting two to eight weeks, partial disability lasting two to six months, and permanent impairment. A patient was classified as partially disabled when his injuries caused loss of school or work days or required special care such as the use of crutches or wearing of a cast, thus resulting in a change from normal activity.

MCH is a 46-bed acute care hospital located in Benton, Kentucky, 20 miles southeast of Paducah, Kentucky, and 125 miles northwest of Nashville, Tennessee. Marshall County is considered to be the heart of the Kentucky Lake recreational area. Both major state parks (Kentucky Dam Village and Kenlake) as well as the majority of private resorts bordering the lake are located within the boundaries of Marshall County. Recreational activities centered in the Land Between the Lakes and Barkley Lake emanate much of the time from Marshall County. Aside from recreation and tourism, the county is mainly agriculturally oriented except for an industrial complex in Calvert City. The county population as of 1986 is 25,839; the figure increases by 5,000 on routine summer weekends and by up to 10,000 on summer holidays.<sup>4</sup> MCH has approximately 6,000 ED visits per year. The ED is staffed 24 hours per day, weekdays, weekends and holidays by an in-house physician.

MCH refers major trauma in most all cases to either of the two tertiary hospitals in Paducah, Kentucky, where there is a complete array of general surgeons and surgical specialists constantly available for trauma referrals. Transport by ground ambulance to definitive care in Paducah takes approximately 20 minutes.

### Results

During the 12-month study period, 51 patients injured in 48 separate accidents entered the health care system via the MCH-ED and were included in the study. Forty patients were male and 11 were female. Ages ranged from six to 40 years. Sixty-nine percent of patients were 20 years of age or younger, but of the 35 patients in this age group, 32 (91%) were male. Male patients between the ages of 11 and 20 made up 51% of the entire study group. These data are summarized in Figure 1. Seventy-seven percent of accidents occurred during the months of April through October.

Three-wheeler ATVs were involved in 39 accidents (81%), whereas four-wheelers accounted for only nine accidents (19%). In 30 of 48 accidents (63%), a single rider was operating the ATV. Fourteen accidents involved multiple passengers (usually two) on a single vehicle. In three of these accidents, both driver and passenger required ED care. In this subgroup of 14 accidents involving 17 patients, nine were injured while driving the ATV, while eight were injured as passengers. This data was unobtainable for four of the 48 accidents.

Information regarding years of ATV operating experience, estimated speed at time of accident, and engine

**TABLE 1**  
**PRIMARY ACCIDENT MECHANISMS**  
(n = 48 accidents)

Mechanism	Number of Accidents	Percentage
Flip	14	29
Rollover	10	21
Hit stationary object	9	19
Fell off ATV	4	8
Hit another ATV	4	8
Unexplained loss of control	3	6
Hit automobile	2	4
Information unobtainable	2	4

**TABLE 2**  
**TERRAIN**  
(n = 48 accidents)

Terrain	Number of Accidents	Percentage
Rocky - flat or rolling	10	21
Rocky - steep incline	8	17
Grassy - flat or rolling	8	17
Grassy - steep incline	3	6
Flat dirt track	3	6
Paved road	8	17
Unpaved road	2	4
Information unobtainable	6	12

size (cc H<sub>2</sub>O displacement) was available for 28 accidents. Eighteen of these 28 patients had less than one year's operating experience and many of the individuals were hurt within the first week after buying the vehicle or while borrowing the vehicle of another person. Ten of these 28 patients reported greater than one year's experience. Ten of these 28 accidents occurred at speeds less than five miles per hour and five additional accidents occurred at speeds less than 15 miles per hour. Seventy-five percent of these accidents occurred using ATVs with engines greater than 150 cc in size.

Patients were wearing protective helmets in 12 of 51 cases (24%), whereas 32 patients (63%) reported that they were not wearing a helmet at the time of injury. Information about helmet use was not obtainable from seven patients, so the percentage of accidents in which no helmets were used could possibly have been as high as 76%. Alcohol was associated with three of the 48 accidents (6%). Mechanism of injury and terrain on which the accidents occurred are summarized in Tables 1 and 2. These data emphasize the dynamic instability of ATVs and the necessity for helmet use even while operating the vehicle on a flat, mown lawn. All 48 accidents occurred in association with recreational activities—none were work-related. Only one accident occurred in association with a formally organized and



sanctioned racing event. Despite the heavy tourism in the area, 40 of the 48 accidents involved residents of Marshall County and six involved residents of neighboring counties, with the vast majority of these accidents occurring in rural, not lakeland areas of the county.

There were no deaths in this series of patients. The principal diagnosis of all patients is shown in Table 3. It should be noted that abrasions and contusions were

**TABLE 3**  
(n = 51 patients)

**PRINCIPAL DIAGNOSIS OF ALL PATIENTS**

Diagnosis	Number of Patients
Sprains of neck, back, or major joints	10
Abrasions, contusions, simple lacerations	9
Vertebral or longbone fractures	7
Concussion	7
Fracture of clavicle	4
Separation or dislocation of shoulder	4
Wrist - hand injury	3
Foot injury	2
Hematuria - post-traumatic, IVP normal	2
Complex lacerations	2
Severe closed head injury with more than transient loss of consciousness	1

**TABLE 4**

**PROFILE OF PATIENTS ADMITTED TO MCH**

Patient	Age	Sex	Primary and Secondary Diagnoses
1	18	M	Post-traumatic hematuria (IVP normal) Extensive contusions and abrasions
2	6	M	Complex scalp laceration Concussion
3	6	M	Facial contusions Concussion
4	15	M	Post-traumatic hematuria (IVP normal) Nasal fracture Concussion Talus fracture Extensive contusions and abrasions
5	24	F	Contusions and abrasions Abdominal pain (observed with serial exams and hematocrits)
6	19	M	Concussion (CT normal)
7	31	F	Fracture of clavicle Extensive contusions and abrasions
8	9	F	Concussion (CT normal) Extensive contusions and abrasions

**TABLE 5**  
**PROFILE OF PATIENTS TRANSFERRED**

Patient	Age	Sex	Principal Diagnosis	Reason for Transfer
9	6	M	Compression fractures, L <sub>4</sub> and L <sub>5</sub>	Neurosurgical care
10	14	M	Tibial fracture Complex knee laceration - Required operative debridement	Orthopedic care
11	19	M	Medial malleolar fracture - Required ORIF	Orthopedic care
12	9	M	Basilar skull fracture Temporoparietal skull fracture Cerebral contusion Optic nerve injury Facial lacerations	Neurosurgical care
13	15	M	Femur fracture	Orthopedic care

present as secondary diagnoses in most all cases. Abrasions were often extensive and complex injuries requiring formal management as partial-thickness burns. All cases of concussion involved transient loss or alterations of consciousness and were often associated with the following symptoms: headache, disorientation, vomiting, dizziness, unusual lethargy or sleepiness. CT was used to evaluate two of five patients admitted to MCH with the diagnosis of concussion and was normal in these cases. Injuries with associated post-traumatic hematuria were evaluated by intravenous pyelography with normal findings in both cases. CT was not used to search for small parenchymal contusions in these patients. Hematuria has since resolved in these patients. Fourteen fractures occurred in our patients, and all were closed. The most commonly fractured bones were the clavicle (n = 4) and tibia (n = 3).

Table 4 summarizes a profile of patients admitted to MCH. The major indication for admission was observation to rule out more extensive injuries and for wound care management. Accordingly, the ISS for these patients ranged from one to nine (mean = 4.1) and length of hospital stay ranged from one to four days (mean = 2.4). Table 5 presents a profile of those patients requiring transfer from MCH for definitive care at another hospital. Injury severity scores for these patients ranged

from four to 26 (mean = 10.6). Hospital stay for these patients ranged between two and 51 days (mean = 20.6). Of those patients between the ages of five to 10 years, five out of seven required hospitalization.

Functional classification data describing the degree of disability caused by each patient's injuries are summarized for all patients in Figure 2. Injuries causing partial disability requiring up to 14 days for complete recovery were most common (n=28), followed by disability lasting two to eight weeks (n=16), minimal impairment with no loss of school or work days (n=5), partial disability lasting two to six months (n=1), and permanent impairment (n=1). Using minimal criteria for inclusion in each functional group, these injuries account for substantial costs in terms of lost productivity. Patient 12, a 9-year-old male who sustained basilar and temporoparietal skull fractures, bilateral optic nerve injuries, and cerebral contusions had an AIS of 5 for head injury and an ISS of 26. His injuries resulted in permanent blindness and impairment in his ability to concentrate as well as radical personality change.

MCH costs for the patients in this study group were \$15,266. The mean ED charge for patients not admitted to the hospital was \$152 per patient (n=38), while the mean cost of the entire hospital stay for those patients admitted to MCH was \$1,025 per patient (n=8). The cost to stabilize and transport the five patients who required transfer averaged \$260 per patient. No data is available regarding the cost of their hospitalization at the individual referral institutions.

### Discussion

Results of the present study clearly indicate that ATV-related trauma is a major public health concern in the rural Western Kentucky community of Marshall County. Although a major socioeconomic focus of the community is tourism, our findings indicate that most ATV-related trauma emanates from residents of the county rather than tourists. This suggests that our experience in Marshall County is likely representative of the ATV problem in other communities of similar size.

The age and sex distribution of ATV accident victims is skewed toward preadolescent and adolescent males (Figure 1). Preadolescents are especially vulnerable to injury. We were first alerted to the potential severity of ATV-related pediatric trauma when, in 1982, an 11-year-old male sustained a blunt abdominal injury requiring emergent laparotomy at MCH. His injuries consisted of a retroperitoneal hematoma, stellate fracture of the right hepatic lobe treated by partial hepatectomy,

and pancreatic contusion managed by placement of multiple closed-suction drains about the pancreas in the lesser sac. He survived. In the present series of patients, patient nine (Table 5), a 6-year-old male, sustained compression fractures of vertebral bodies L<sub>4</sub> and L<sub>5</sub>. Patient 12 (Table 5), a 9-year-old male riding without a helmet, sustained a severe closed head injury (AIS = 5, ISS = 26) resulting in permanent impairment.

The CPSC ATV Task Force has determined that "children under the age of 12 years lack adequate physical size and strength, cognitive abilities, motor skills, and perception to operate any ATV safely."<sup>2</sup> Our experience shows that children 15 years of age and younger are not only injured quite frequently but tend to be more severely injured. Of the 13 patients in this study who required hospitalization, eight were 15 years of age or younger. Five of seven patients between the ages of five and 10 years required hospitalization. Thirty-five percent of the patients in this study were 15 years of age or younger, yet these patients accounted for 61% of injuries which resulted in partial disability for two months or longer or permanent impairment.

Experience at major trauma referral centers likewise has demonstrated the disproportionate vulnerability of children to severe ATV-related injuries. Between September 1984 and May 1987, seven pediatric patients died at Vanderbilt University Hospital as a result of ATV accidents, whereas another six children suffered permanently disabling injuries.<sup>7</sup> This data suggests an almost equal number of disabling injuries to deaths in pediatric patients referred to a trauma center. The ATV is truly the most dangerous "toy" on the market.

In Kentucky, three-wheeler ATVs are regulated under Kentucky Revised Statute (KRS) Chapter 189 which allows their licensing as a "motorcycle" vehicle if minimal safety standards are met.<sup>15</sup> Operation of a licensed three-wheeler on a public highway is legal, and when operating such a vehicle, the driver is required to wear a helmet. Four-wheeler ATVs also are regulated by KRS Chapter 189, which allows their licensing provided that minimal standards for safety equipment such as proper headlights, turn signals, *etc.* are met.<sup>16</sup> Under this law, the driver of a four-wheeler on a public highway is not required to wear a helmet. Helmet or no helmet, the CPSC and manufacturers of ATVs alike warn of the hazards of operating ATVs on paved roads.<sup>2</sup> In our study, 17% of accidents occurred with patients operating ATVs illegally on paved, public roads. Marshall County Sheriff Brian Roy believes that the current "loophole" in KRS 189, a group of statutes not designed



for ATVs but now used to regulate them, will lead to an increasing number of fatalities from ATV versus automobile and truck accidents.

There are no helmet requirements for either three- or four-wheelers when operated off the road in Kentucky. In our study, the documented use of helmets in 24% of patients exceeds that reported in previous series.<sup>1,17,18</sup> Perhaps this is due to increased media attention given to the ATV problem and, hence, increased public awareness. It is well-established that helmet laws have had a positive effect in decreasing morbidity and mortality related to motorcycle accidents, and in states where helmet laws have been repealed, there has been a subsequent increase in motorcyclists' head injuries and deaths.<sup>19</sup> Because so few ATV operators wear helmets, any intervention resulting in increased use of helmets could have substantially beneficial effects.

Accidents happen on ATVs of all sizes and at all ranges of speed. Patients nine and 12 (Table 5) were operating an 80cc four-wheeler and a 110cc three-wheeler, respectively. Both vehicles overturned while traveling at rates of speed below five miles per hour. The majority of ATV accidents involved drivers with less than one year's experience. Consistent with our findings, the CPSC ATV Task Force has determined that the younger and more inexperienced drivers pose the greatest risk for accidents, and the risk increases with the size of the vehicle.<sup>2</sup> Other factors influencing risks for accidents included terrain characteristics (Table 2), multiple riders, concurrent use of alcohol, and the sex of the rider (Figure 1).

Primary mechanisms for ATV accidents are flipping of the vehicle, rollover, and poor steering control, which may partially account for impact with stationary objects as well as other ATVs and automobiles (Table 1). Due to rider position and configuration of the ATV, operators are commonly struck by some part of the vehicle despite the particular mechanism initiating the accident.

The physical tasks required of a three-wheeler operator when turning the vehicle are much different from those required to turn a bicycle or motorcycle. In fact, advanced motorcyclists may find the transition to a three-wheeler difficult and quite unnatural. Because of physical properties unique to three-wheelers,<sup>5</sup> including a high, rearward center of gravity and rear axles which have no wheel differential, drivers must shift their weight toward the outside wheel, *ie*, away from the center of the turn, to successfully complete a turn. At the same time, drivers must maintain a proper steering angle

which may be subtly different from their shifted body position. Failure to complete these tasks in a timely manner results in rolling of the vehicle.<sup>2</sup> When there are multiple riders, a situation that ATV manufacturers specifically warn against, more weight at the vehicle's rear makes it both more unstable and more difficult to steer.<sup>2</sup> Twenty-nine percent of accidents in this study involved multiple riders.

The most common mechanism initiating accidents in our study was flipping (Table 1). This occurred when riders attempted to climb steep inclines with a jack-rabbit start or with heavy throttle or when riders attempted to descend steep slopes at inappropriately high speeds. When ATVs were brought to sudden stops, riders, and drivers to a lesser extent, had a tendency to be thrown over the front of the vehicle. Poor steering control also is commonly the cause for ATV accidents and is largely due to the wide, tube-like tires of the vehicle. Due to size and friction, these tires impart much straight ahead directional stability to the vehicle which must be overcome for the vehicle to respond to steer commands directed to the front wheel.<sup>2</sup>

It is clear that the unique performance characteristics of ATVs require strong, coordinated, and often complex physical maneuvers with constant cognitive measures of planning and anticipation for safe operation of the vehicle. Under normal operating conditions in an off-the-road setting, the ATV may make demands which exceed the ability of even experienced drivers. Increasing the number of wheels from three to four leads to a reduction in the probability for accidents by adding stability to the ATV, thus making it more "forgiving" to the operator.<sup>2</sup> This factor is already leading to a substantial increase in four-wheeler sales relative to the sales of three-wheelers. Once the chain of events for an accident is set into motion, however, the four-wheeler offers no protective advantage over the three-wheeler.<sup>2</sup>

In previously reported series,<sup>1,17,18</sup> fractures have been the most common ATV-related injury. In our series (Table 3), sprains, contusions, and abrasions were the most common injuries, followed by fractures and head injuries. The exposed upper torso seems especially vulnerable, with clavicular and shoulder injuries being very common. Fractures occurred in 22% of our patients, but none were open fractures. Abrams previously has noted that fractures sustained by ATV riders are typically less severe than those sustained by motorcyclists.<sup>17</sup> None of our patients in 1986 sustained major intra-abdominal trauma. Two patients with post-traumatic hematuria had normal intravenous pyelo-

grams. Had these patients been studied by CT scan, perhaps minor renal contusions would have been discovered.

Abrams' study of ATV-related injuries in 54 patients presenting to a rural community hospital in Minnesota over a 12-month period in 1983 is similar to our own, except that two patients in his series died—one from intra-abdominal hemorrhage and one from massive head injuries.<sup>17</sup> Patients at MCH were resuscitated according to Advanced Trauma Life Support protocols established by the American College of Surgeons and were transferred to more sophisticated centers early in their course of injury. This most certainly helped to prevent mortality, but the fact that there were no fatal ATV accidents in Marshall County in 1986 may be also attributed to sample size. Nationally, the CPSC estimates that 20 deaths occur from 7,000 ATV-related injuries, *ie*, 1/350, in a typical month.<sup>2</sup>

Excluding hospital costs at referral institutions, radiologists' and surgeons' fees, ambulance charges, costs of medical supplies such as dressings and antibiotics, and costs for follow-up and rehabilitation, this group of patients accounted for hospital charges of \$15,266 at MCH. Ninety percent of patients suffered some degree of partial disability due to their injuries and thus experienced a substantial loss of wages and productivity. The loss sustained by patient 12, his family, and society as a whole, is and will continue to be immense.

This study has identified a number of specific areas for potential intervention to increase the safety of ATVs. Available data is most supportive of the need for legislation to prohibit the use of any and all ATVs by children 12 years of age and younger. An astoundingly low percentage of ATV operators wear helmets. Hence, legislation to mandate the use of protective helmets would be of great benefit. Guidelines for protective clothing might also be incorporated into such legislation. Safety courses should be developed to meet a minimal set of government standards and should be administered by ATV dealers to buyers prior to release of the vehicle. Courses must not be limited to the buyer but should be taken by all who intend to use the vehicle. Multiple riders on ATVs must be strictly prohibited. Loopholes in the law allowing the licensed use of ATVs on public highways must be corrected. Use of alcohol while operating an ATV must be specifically prohibited by public law. All regulations should be enforced. Penalties may be directed at the owners of the vehicles, especially when children are found in violation. As demonstrated by the remarkable success of the

Tennessee Child Protection Act, enforcement of a set of safety regulations can dramatically decrease injury and death.<sup>20</sup>

Currently, government agencies, especially the CPSC, and market trends, likely due to an increase in public awareness of the potential safety problems of ATVs, are putting pressure on manufacturers to stop the sale of three-wheelers in this country, and a recall of three-wheelers now in use has been suggested.<sup>21</sup> As advocates of health care for our patients, especially our pediatric patients, Kentucky primary care physicians and surgeons should strive to educate the public on ATV-related injuries, specific mechanisms responsible for these injuries, and specific measures to be taken to operate the vehicles more safely. We must also express our concern to state government asking for clarification of its position on ATVs, asking for better regulation of the use of ATVs in our state, and asking for workable strategies to help local law enforcement agencies enforce the regulations that will lead to the safer use of ATVs in Kentucky.

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### **Addendum**

On June 20, 1987, a nine-year-old boy and his 12-year-old companion were killed in Graves County, Kentucky, when they drove their ATV into the path of an oncoming pick-up truck. I encourage Kentucky physicians and surgeons to call for state legislative control and strict local enforcement to prevent additional tragic deaths and injuries, especially in children, associated with the use of ATVs.



**References** 1. Golladay ES, Slezak JW, Mollitt DL, Seibert RW: The three wheeler - A menace to the preadolescent child. *J Trauma* 25:232-233, 1985. 2. United States Consumer Product Safety Commission: *Report of the CPSC All-Terrain Vehicle (ATV) Task Force: Regulatory Options for All-Terrain Vehicles*. USCPSC, Washington, D.C.:1-21, September 30, 1986. 3. "All-terrain vehicles spark debate as user deaths and injuries mount." *Wall Street Journal*, February 11, 1987. 4. Walters B: All-terrain vehicles. 20/20 ABC Television. April 1985. 5. Haynes CD, Stroud SD, Thompson CE: The three wheeler (adult tricycle): An unstable, dangerous machine. *J Trauma* 26:643-648, 1986. 6. Smith SM, Middaugh JP: Injuries associated with three-wheeled, all-terrain vehicles, Alaska 1983 and 1984. *JAMA* 255:2454-2458, 1986. 7. Morris JA, Johnson LG, Plunkett RJ Jr, Wall JE: ATVs and pediatric population. *American Association of Automobile Medicine* (in press). 8. Sneed RC, Stover SL, Fine PR: Spinal cord injury associated with all-terrain vehicle accidents. *Pediatrics* 77:271-274, 1986. 9. Committee on Medical Aspects of Automotive Safety: Rating the Severity of tissue damage: I. The Abbreviated Scale. *JAMA* 215:277-280, 1971. 10. Baker SP, O'Neill B, Haddon W Jr, Long WB: The Injury Severity Score: A method for describing patients with multiple injuries and evaluating emergency care. *J Trauma* 14:187-196, 1974. 11. Trunkey DD, Siegel J, Baker SP, Genarelli TA. Panel: Current status of trauma severity indicators. *J Trauma* 23:185-201, 1983. 12. Bull JP: The Injury Severity Score

of road traffic casualties in relation to mortality, time of death, hospital treatment time and disability. *Accid Anal Prev* 7:249-255, 1975. 13. Morris JA Jr, Auerbach PS, Marshall GA, Bluth RF, Johnson LG, Lewis FR, Trunkey DD: The Trauma Score as a triage tool in the pre-hospital setting. *JAMA* 256:1319-1325, 1986. 14. Personal communication. Marshall County Chamber of Commerce, January 1987. 15. Powell KA: "Affidavit Concerning Three Wheel Off-Road Vehicles." Memorandum to Steven Reeder, Office of General Counsel, Transportation Cabinet, Commonwealth of Kentucky, Frankfort, Kentucky, October 24, 1985. 16. Powell KA: "Four Wheel Off-Road Vehicles." Memorandum to Steven Reeder, Office of General Counsel, Transportation Cabinet, Commonwealth of Kentucky, Frankfort, Kentucky, January 9, 1986. 17. Abrams BE: Trauma caused by three wheel motor vehicles - An unrecognized epidemic? *Ann Emerg Med* 15:1288-1292, 1986. 18. McDonald WG, Stribling IG: Trauma associated with three-wheel recreational vehicles. *J Miss State Med Assoc* 24:121-123, 1983. 19. McSwain NE, Petrucelli E: Medical consequences of motorcycle helmet non-usage. *J Trauma* 24:233-236, 1984. 20. Decker MD, Dewey MJ, Hutcheson RH, Schaffner W: The use and efficacy of child restraint devices. The Tennessee experience, 1982-1983. *JAMA* 252:2571-2575, 1984. 21. "Trouble on three wheels. It looks like a child's toy, but the all-terrain vehicle can be lethal." *People*, February 23, 1987.

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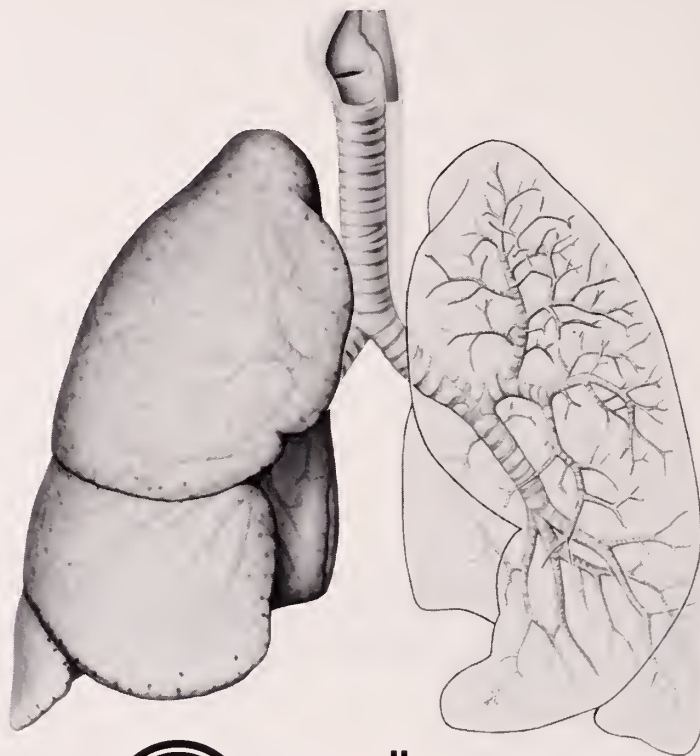
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- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
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insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

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Nearing the end of my first clerkship in medical school, I found myself in front of a disheveled man, fresh from the streets, body lice his only companions. Too hungry to eat, too sad to converse, he sat before my judgmental gaze with head bowed. Some of his blood made its way from my syringe to the lab, where it produced diabetic evidence.

Moments then minutes passed as I considered my plan of action or inaction. My sidekicks, an intern only two years my senior and a first year resident, our commanding officer, were at the front with me.

Inaction sometimes accompanies the red eye shift in the hospital where fatigue and loneliness hounded us. Finally orders came to begin the treatment, but we balked, those of us soldiers—nurses, aides, medical students—to whom the orders meant a call to action. Certainly the man and his pediculi had to be separated, his body cleaned, yet he needed swift medical intervention. My first encounter with a medical pariah had begun. I sifted through my prejudices, allowing each one to bend my conscience, but impressively discarding it. My mother's cleanliness, what little of it I inherited, needed to be held in abeyance, while her compassion prevailed. My father's disdain for the unproductive had to be forgotten, while his will to succeed and perform took command.

Contamination—all of us felt that ogre—was the enemy. No volunteers took the opportunity to be brave, until with a sigh of consent I carefully removed his clothes and banished them to the incinerator, having been assured that he would not go unclothed. Multitudes of whitish creatures scrambled for cover, sensing their destination to the crematorium. Bare before me, exposed to the night cold, my nameless man was finally assuming a patient's place. I was intimidated enough to only reluctantly pull a sheet for his cover. My teacher would tell me later that these minutes of cowardice were costly. Intravenous lines were hung, more blood gingerly drawn and at last rejuvenating medicine poured into him. Each of these steps was accompanied by banter, sarcasm, disdain and little sensitivity by our entire staff. Morning was lighting up the night and the papers had to be constructed, all for the performance at 7 a.m. before our chief.

Sometime during this night life began to ebb away from this man. Eventually our will was strong and our zeal lighted to rescue him, but down he did in his electrolyte disaster. Some stood, others sat with backs turned as his final review before the troops was supine under the same white sheet I put on him.

Our professor was a grandfather, with a white mane and a kindly look that belied his rage at us that morning. Excuses flowed and data showered as we

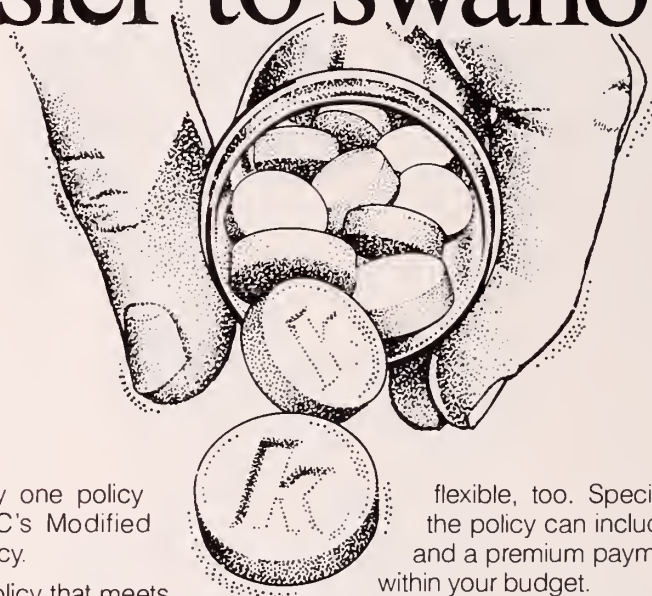
tried to sanctify our deeds. His words demoted us, his advice seared our brains. To take that sacred oath is to accept all who come before us for help. Risky business is what we have, like the cop on the beat, the fireman at the blaze, the window cleaner on his perch. Reports of our peers getting sick in the line of duty pierce us with fear. That goes with the territory, or if you like Trumanese—if you can't take the heat, get out of the kitchen.

Now we have the AIDS monster and my friends and loved ones implore me to be careful, to be circumspect about my contact with patients. Certainly I take caution, follow appropriate warnings, cognizant of the dangers. Yet the man from the streets and the lesson he taught me with his dying were not forgotten. Doctoring is what we do, and people are our raw materials. All the people should be welcome to our healing art and never should we have to recall a neglected soul.

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## U of L School of Medicine

### A Tradition of Excellence

Donald Kmetz, M.D.  
Dean, U of L School of Medicine



This year represents the Sesquicentennial of the School of Medicine, and it is a great privilege to have the School highlighted in this month's edition of the *Journal of the Kentucky Medical Association*. The relationship between the academic and private medical sector in this community has been extraordinarily strong which is a tribute to those of you who are clinical faculty and active participants in KMA. We have a long tradition of high quality medical care and educational excellence at the University of Louisville spanning 150 years. It is certainly appropriate that we pause for a moment and reflect both on our past heritage and on what the future might hold.

Elsewhere in this publication Doctor Tom Owen, Associate University Archivist, has graciously provided us with a thorough history of the University of Louisville School of Medicine from its founding date of 1837. This makes us the oldest continuous medical school west of the Allegheny Mountains. Our history includes prestigious academic leaders such as Doctors Gross, Yandell, Drake, and Abraham Flexner among others. We must continue to call on this rich heritage as we attempt to address the current issues facing the profession of medicine.

Since future success is dependent on proper planning, I have asked Doctor David Weigman, Assistant Dean for Academic Affairs, to provide you with a detailed review of our very ambitious strategic planning process which is included elsewhere in the *Journal*. It is important to focus on priorities for action, and we have tried

to do this in the School of Medicine by attempting to enhance our urban as well as our statewide mission and increasing our research capacity while maintaining educational excellence. This will require improved academic computing which is a high priority in our plan.

The planning process forces issues to be addressed and, of course, one of the principal issues in medical education has to do with manpower and graduate medical training. For that reason, I have asked Doctor Al Thompson, Associate Dean for Clinical Affairs, to provide an article on this subject. Needless to say, the solution to this problem will be arrived at jointly. The Kentucky Medical Association currently has a manpower committee, under the capable leadership of Doctor Bob Goodin, actively working on this subject. In addition, the Licensure Board is providing careful surveillance of the training and qualifications of physicians who wish to enter the state. With a declining applicant pool for medical school, it is more important than ever that we preserve the quality of medical education in order to protect the health needs of our state in the future.

After almost seven years in the Dean's Office I must say it has been a rewarding and yet sometimes frustrating experience. Rewarding in that we have moved the school toward greater academic achievement. Frustrating in that we have not achieved all of our goals. Let me focus briefly on some of the tangible "good things" that have occurred in this rather recent span of time. We have recruited 10 outstanding chairmen over approximately five



years which may be unparalleled. These individuals have provided us with vigorous academic leadership and have added new faculty who have infused a sense of enthusiasm and momentum. This change in leadership, together with the establishment of several Endowed Chairs through the very successful "Quest for Excellence," should provide sustaining educational quality. Tangible evidence of this progress was very apparent during the recent L.C.M.E. medical school accreditation visit in which we received a full five year accreditation. Furthermore, our student performance continues to improve on the basis of residency matching, National Board scores and other objective parameters.

Our clinical relationships with a variety of institutions continue to thrive. We are particularly fortunate to have meaningful affiliations in both the for-profit, not-for-profit and Veterans Administration system. Our students have access to private patients, as well as a generous number of indigent patients, which certainly enhances their educational experience. The medical center facilities are outstanding particularly with the opening of Humana Hospital University, the new Kosair Children's Hospital and the recent transfer of ownership of the Cancer Center to the University of Louisville. We must now work very hard at learning the best way to function in this complex medical environment to ensure quality education, research and patient care. We are clearly attempting to meet this mandate through projects such as our transplant programs at Jewish Hospital and Kosair Children's Hospital, our *in vitro* fertilization and spinal surgery program at Norton Hospital and our continued commitment to trauma care, burn care, diabetes, cardiology and other programs at Humana Hospital University. The Veterans Administration Medical Center remains a strong ally in both clinical education and research. In addition, we have recently established a multidisciplinary Center

in Applied Microcirculatory Research funded from a \$1.2 million grant from Humana.

Let me comment briefly on our Humana relationship which in May 1987, will have been in existence for four years. By almost all measures the relationship has been successful to both Humana and the School of Medicine. Operations have improved immeasurably, and many new services have been added including the diabetes unit, MRI, geriatric unit, specialized laboratories, laser endoscopy service and others. The patient mix is favorable for education with approximately 30% indigent and 25% private. The remaining patients fall into the Medicare and Medicaid categories. Although the occupancy has dropped slightly in the recent past, it has averaged approximately 75% over the past two years. This combination of patients has provided significant profitability to Humana, and consequently the University has been the recipient of approximately \$5 million of new money over the three-year period. This is directly attributable to financial considerations within the agreement which include 20% of the profitability and the interest on \$4 million. These new resources were heavily utilized in the recruitment of several new chairmen, including basic science chairmen in Anatomy and Biochemistry who required significant funds for new research equipment. There is no question that we are a better School of Medicine as a result of the distribution of resources associated with the Humana relationship.

In spite of the overall success of the agreement, indigent care problems still exist. Thus far, we do not have adequate funding for indigent children in our community who are principally cared for at Kosair Children's Hospital. Furthermore, we have an inadequate solution for indigent ambulatory patients since the Quality and Charity Care Trust is not available for this purpose. A variety of agencies, including the University of Louisville

clinics, provide these services which are basically non-funded and poorly coordinated. The School of Medicine alone provides approximately \$13.5 million of unreimbursed indigent care annually. The solution to this problem will require a coordinated effort of multiple agencies and governmental offices. In addition, we are vastly exceeding the amount of funding in the Indigent Care Trust which has been assigned to out-of-county patients. Only 10% of the fund is available for this purpose although we are currently expending at a rate of approximately 24% of the funds for patients outside Jefferson County. This amounts to an overage of nearly \$9 million a year, nearly half of which is from Southern Indiana. Although the Humana relationship has been successful in making new resources available to the School of Medicine, while meeting the indigent adult inpatient needs of Jefferson County and providing an optimal hospital environment in which to teach, it remains for the medical community collectively to help address the unsolved issues of pediatric indigent care, ambulatory indigent support and out-of-county indigent services.

In closing, let me add some comments on what I anticipate in the future for our School of Medicine. I expect the applicant pool for medical school to continue to decline over the next few years making it essential that we all act as advocates for the profession and encourage the brightest young people to pursue medical careers. I anticipate that we will in a sense need to "market" the profession and are already working with high school students and planning programs on college campuses to include "medical students in residence." In spite of the declining pool, standards must be maintained at all costs, and we are seriously considering approaches such as pure academic scholarships and an honors program. We are also attempting to address the distressingly low minority student admissions by instituting a Medical Edu-

cation Development program through which selective students are given an additional year of preparation which includes some medical school classes. If manpower studies indicate that a reduction in class size is needed, then we must fight hard to maintain our base budget since it is apparent that the costs associated with a medical school are not directly proportional to the size of the student body. I see curriculum moving toward more ambulatory care and primary care experiences with an emphasis on subjects such as nutrition, geriatrics, health promotion/disease prevention and humanistic medicine. Lecture hours in the basic sciences will be decreased, and there will be a greater attempt to promote assimilation of information and problem solving. Computers will become an academic tool in our curriculum at all levels. There will be a greater emphasis on research with a need for core laboratories to house very expensive equipment and pro-

mote collaborative investigation. A new animal care facility will likewise be built to support our research mission. I see continuing cooperation with UK in programs such as the Kentucky Organ Donor Affiliates and rural Area Health Education Centers, although I do not anticipate that we will pursue the dental school model of sharing chairmen and other administrators. I believe we will continue to have a broad base of hospital affiliations with a growing participation by clinical faculty not only at the affiliate hospitals but also at Humana Hospital University. The real identity of the "Medical Center" must emerge and although competition will continue, a growing degree of cooperation and non-duplication through the university relationship will ensue. The School of Medicine will continue to reach out to industry wherever possible and can become a catalyst to economic growth. In order to meet this broad mission of service, teaching and research, which

requires access to a sufficient number of patients, it will be necessary for the School of Medicine to evolve a non-tenure track for the teacher/clinician who will have limited research responsibility.

Finally, I hope we will be successful in raising sufficient funds to permanently restore the Administration Building of the old Louisville General Hospital which does have historical preservation quality. I believe that this building, which is located on the crossroads of the medical center, should be the permanent site of the administrative offices of the School of Medicine to include alumni offices and services. Once this project has been initiated, I will be calling on our alumni for assistance. In my opinion, this facility could provide the identity we need in the medical center to link our illustrious past with what I feel is a bright future for the School of Medicine.

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# U of L Medical School Reaches 150

Tom Owen, Ph.D.

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**T**he birthday cake must have room enough for 150 candles! Get out the horns, hats, streamers, and kazoos because there's cause to celebrate: the University of Louisville Medical School is a century and one-half old!

The city of Louisville was "feeling her oats" in 1837 when the Louisville Medical Institute was formed. The city's economy and population were skyrocketing, fueled in large part by a flourishing steamboat trade. For too long the River City had bowed to Lexington — frequently called the "Athens of the West" and home to the prestigious Transylvania University Medical School. Prompted by zealous community boosters like James Guthrie, city government appropriated funds for a campus for the new school at Eighth and Chestnut Streets. After holding classes in temporary quarters in 1837, the Louisville Medical Institute moved into a grand, city-funded, Greek Revival structure designed by well-known Kentucky architect Gideon Shryock. To add insult to injury, promoters of the Louisville school lured away many of Transylvania's finest medical instructors, a loss that ultimately caused the Lexington school to close.

In 1846, the Medical Institute was renamed the Medical Department of a new University of Louisville. Despite initial municipal funding, the medical faculty operated the school for profit, virtually free of city control. During those first years, several faculty members were the bright-lights of their profession; anatomist and surgeon Samuel D. Gross, for instance, re-

ported the results of his lab discoveries in widely-consulted medical treatises, as well as in the respected *Western Journal of Medicine and Surgery*, based in the River City. Other prominent early faculty included Daniel Drake, a pioneer in environmental medicine; botanist Charles Wilkins Short; and chemists J. Lawrence Smith and Benjamin Silliman.

Throughout the 19th century, U of L's Medical Department met repeated challenges. In 1856, fire nearly destroyed the school's elegant classroom and administration building, but rebuilding efforts began immediately. At one point, rival physicians operated six competing medical schools, threatening U of L's underpinning, but making Louisville one of the nation's major centers for physician training. By 1908, the university had absorbed all challengers. Ironically, the "old" medical school building still standing on the northwest corner of First and Chestnut — where the majority of Kentucky's current physicians were trained — was built in the 1890s by a rival school and not occupied by U of L until 1909.

Reform at U of L was well underway when Abraham Flexner, a Louisville native, published his widely-circulated critique of American and Canadian medical education in 1910. (Flexner's brother, Simon, a graduate of U of L's 1889 medical school class, became one of the 20th century's foremost medical investigators and research administrators.) City government, moved by calls for reform, began annual contributions to U

of L to improve both undergraduate and professional school instruction. In 1914, a new city hospital — the medical school's center for clinical instruction — was opened on East Chestnut Street. In this period, early "accident service" was pioneered at the hospital, an innovation that was refined in the 1930s and 40s by U of L surgeon R. Arnold Griswold, who has been called the "father of modern day trauma care."

In the years after World War I, U of L's medical school enriched its solid reputation for extensive hands-on clinical instruction, both for the basic M.D. and a slowly growing list of residency programs for specialists. The pace for effectively blending instruction and investigation was set by John Walker Moore, who served as medical school dean from 1929 to 1949. Moore was a masterful diagnostician, bewildering his students with a folksy blend of common-sense observation and insight from his research on the cardio-vascular system. Sidney I. Kornhauser, another intellectual pillar of this era, served as chair of the Department of Anatomy from 1922 until 1958, while pioneering surgeon R. Glen Spurling, who headed the neurosurgery team in the European theater during World War II, was both a prolific medical scholar and highly skilled technician. Throughout the late 19th and 20th centuries, U of L faculty and graduates repeatedly provided leadership to the medical profession, including several presidents of the AMA. Med professors David Yandell and Irvin Abell headed



## **Medical School Reaches 150—Owen**

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the organization in the 1870s and 1930s respectively, while Hoyt Gardner, a graduate in the class of 1950 and clinical professor at the school, served in 1979-80.

Between World War II and 1970, the gap between escalating costs and U of L's limited resources grew critical, a condition only slightly relieved by new support from federal programs. When a second medical school for Kentucky opened in Lexington in 1960, state aid for U of L's medical program was further compromised.

Despite setbacks, in 1970, the university managed to provide new quarters for the school of medicine in a modern Health Sciences Center, positioning her for renaissance. U of L's entry into the state system of higher education the same year and the lease of its state-of-the-art teaching hospital to a private corporation in 1984, as well as generous support from private donors, have enabled today's School of Medicine to move boldly forward in both instruction and research.

A tree can't be accurately measured

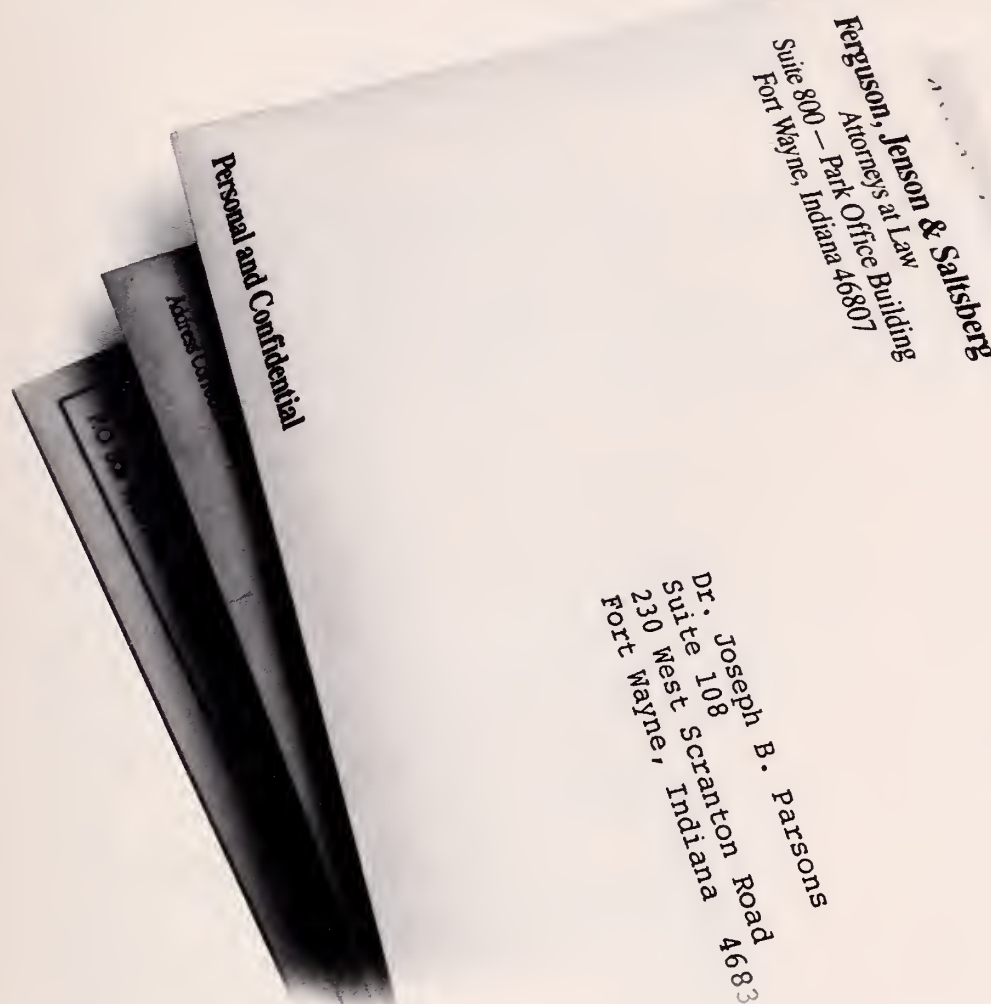
when it still stands tall and proud, deeply rooted in a rich tradition that reaches back to 1837. The School of Medicine secures U of L's claim as Kentucky's oldest publicly-funded institution of higher education and that venerable school's past achievements provide inspiration for meeting the challenges of the future. Happy 150th Birthday — U of L School of Medicine!

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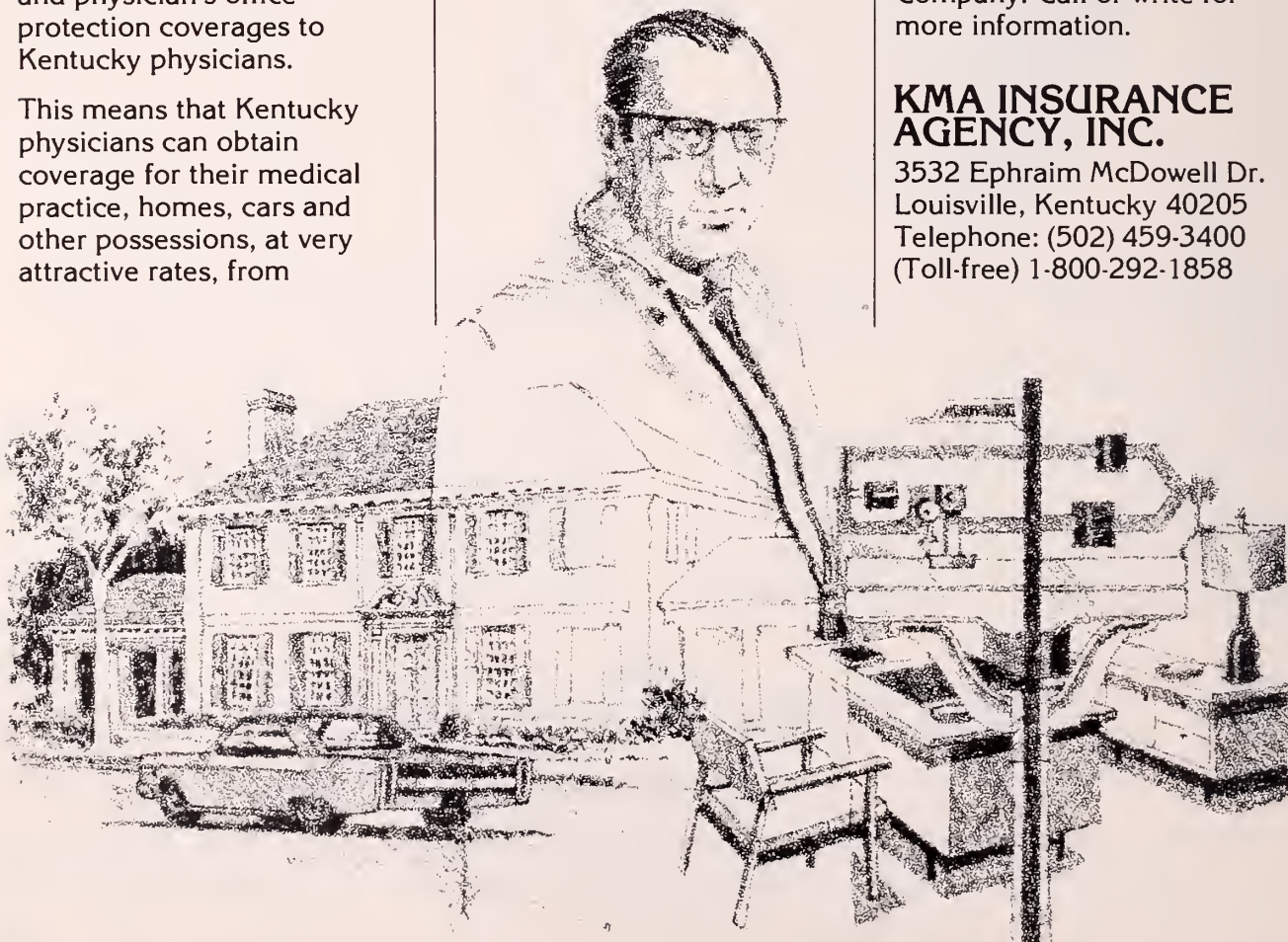
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# Physician Manpower and Graduate Medical Education

Alfred Thompson, Jr., M.D.  
Associate Dean, Clinical Affairs

New and stronger pressures to reduce federal spending and the growing concern within the medical profession that a surplus of physicians already exists or looms in some regions are focusing greater attention on the question of how many medical students the United States should be training. Certainly, no consensus has emerged, but federal policies are increasingly based on the administration's assertion that a physician surplus already exists. As with many public policy issues, the answer to the question "Does the United States already have a physician surplus?" depends largely on one's interests. The federal government argues, for the most part, that there is indeed a surplus of physicians and that, as a consequence, tax-financed support for medical education should be sharply cut. This includes federal support for graduate medical education. I shall discuss two problems that are clearly interrelated. First is physician manpower, and second is graduate medical education. Lastly, I will discuss the linkage between the two in the light of recent federal policy, several state studies, and the recommendations of some of the state studies.

## I. Physician Supply Issues

Approaches to the issue of the physician supply reflect the ebb and flow of public policy. Sixteen years ago, the Carnegie Commission on Higher Education declared in a report, "The most serious shortages of professional personnel in any occupational group

in the United States are in Health Services." At that time there were 152 nonfederal physicians for every 100,000 civilians. In the ensuing years, Congress increased the federal investment in educating health professionals and, as a result, bolstered the total supply of providers in a spectacular fashion. By 1981, there were 199 physicians per 100,000 population.

The most comprehensive information to date on physician supply and demand has been provided by the Graduate Medical Education National Advisory Committee (GMENAC). This report was issued in 1981. The GMENAC report has received many criticisms, however, the projections reveal a steadily growing supply of physicians. The committee estimated that there will be 536,000 practicing physicians in 1990, and 643,000 in the year 2000 as compared with 375,000 physicians in 1978. These figures contrast sharply with the estimated need for physicians, which the GMENAC has put at 466,000 and 498,000 for the years 1990 and 2000 respectively. A recent report by Public Health Service, published in March 1985, revealed increased projections over the GMENAC report. Their 1985 projections estimated by 1990 the number of active physicians would be 595,000, and by 2000 the number expected to reach in excess of 700,000. As a result, the physician-to-population ratio will climb from 199 per 100,000 population in 1981 to 235 in 1990 and 260 in 2000. The physician-to-population ratio in Ken-

tucky has increased from 116 per 100,000 population in 1976 to 155 in 1985. This report also estimated that one out of every five active physicians in 1990 and 2000 is projected to have graduated from medical schools outside the U.S. and Canada. Last year, 15% of physicians in Kentucky were graduates of foreign medical schools. More recently, the American Medical Association Task Force in Manpower in its report in 1986 concluded that a surplus of physicians is likely and expressed concern that the impending surplus would have negative consequences for both the quality and cost of medical care.

Once the GMENAC published its landmarked report, it became incumbent on the medical profession to reexamine the questions of demand for physicians, geographic distribution, postgraduate training for graduates of foreign medical schools (both U.S. citizens and citizens of other countries), and the changing economic of medicine, particularly the emerging role of health maintenance organizations and their influence on the need for subspecialists.

The GMENAC's report was written seven years ago. A relative question at this point is whether the committee's estimates remain valid, at least in the view of its members. The subject was addressed by Doctor Tarlov, Chairman of the GMENAC, when he spoke on March 11, 1985 at the Private Sector Conference sponsored by Duke University. In his presentation and his subsequent work, Doctor Tar-



lov noted that at the time of GMEN-AC's original report there were "two compartments of medicine in practice": the "fee-for-service compartment," which comprised about 95% of all practicing physicians and in which physicians enjoyed autonomy, and the "federal compartment," comprising approximately 19,000 government-employed physicians. Now there is what he characterized as a "third-compartment": physicians who provide prepaid care on a capitated basis to patients enrolled in health maintenance organizations (HMO's). At its current growth rate, this new category of physicians will approach predominance by the turn of the century. Doctor Tarlov projected that by the year 2000, approximately 40 to 50% of the United States' population will be enrolled in HMO's, PPO's, IPA's, or some other form of prepaid capitated program. The first compartment, which Doctor Tarlov labels the "fee-for-service model," currently uses approximately 200 physicians per 100,000 population or about the national average. The third compartment, which he designates as the "fixed proportions model," is the prepaid, capitated segment of the system. It utilizes physicians at a rate of 120 per 100,000 population.

The problem of assessing national, regional, and state physician manpower needs is complex. While medical school class size and graduate medical education, with inputs from U.S. medical schools and foreign medical schools are important factors, several other factors also affect physician supply and manpower needs. These forces exert pressures in the external environment of the graduate medical education process. Some forces are unpredictable and require assumptions about their impact on graduate medical education and physician manpower. They include: the multiple independent actions of private and public medical schools, residency review committees, and hospitals; the increasing number of fe-

male physicians; the age of physician population and retirement rates; increasing competition among providers; and the effects of "new" health care delivery systems and manpower; future epidemiology and future technological advances. One example is the number and percentage of females graduating from U.S. medical schools and receiving residency training, which has been increasing steadily. Twenty-six percent of all residents on duty September 1, 1985 were female. Research has shown that female physicians tend to see fewer patients than males and have lower productivity, because many suspend medical practice to raise families or tend to work more frequently in part-time employment.

It is felt that some of the projections may overstate the future physician surplus, however. In a study done on Graduate Medical Education in Wisconsin, published in November 1986, it was noted that the Wisconsin data base for projections was weak. It was based on licensure data and did not include patient encounter information. Furthermore, like other studies, it did not include in the projections several factors that are reducing the aggregate time physicians engage in active clinical practice. In addition to the increasing number of women in practice, there is some early national evidence that the attrition rates for physicians over 55 may be increasing due to increased competition in malpractice problems. Also, the previously mentioned impact on HMO's, their physicians work shorter hours than fee-for-service physicians. Although HMO's use fewer physicians per thousand, HMO's tend to enroll younger and healthier populations, leaving the higher risk patients in the fee-for-service sector, which may skew the HMO physician-to-population ratios. The major reduction in cost for HMO's is reduced hospitalization and not physician visits. Thus, the impact of the growth of HMO's on total demand for physicians is unclear, al-

though their effect on shifting demand toward primary specialties is substantiated.

In-state medical training directly influences physician supply. However, the degree of influence that training has over supply varies from state to state and region to region. Research documents that the majority of physicians practice in the state in which they attended medical school or did graduate training. In Wisconsin, nearly 25% of physicians received both medical school and residency training in Wisconsin. Residency training contact only (19%) was a more powerful influence on in-state location than medical school only (13%). Therefore, about 44% (25 + 19) of active physicians in Wisconsin reported receiving in-state residency training. Of those active physicians who completed residency training in Wisconsin through 1980, about 40% stayed in the state. In general, the state in which one's residency training is conducted is more closely associated with the initial location of practice than with the state of one's medical school training. Control of input into medical education can only be accomplished by limiting or further decreasing medical school class size. Output and control of specialty distribution can be accomplished through management of graduate medical education programs. Inputs of foreign medical graduates can also be controlled by management of graduate medical education programs. In the next section, I will discuss further the interrelationship of graduate medical education with physician manpower.

## II. Graduate Medical Education Issues

During the past several years, concern has developed at both the federal and many state levels about the size, cost, and distribution of the training of resident physicians. The total costs of residency training have grown rapidly, with increases in medical stu-

dent enrollment, the escalation in hospital costs, and the elongation of residency programs in some specialties. It is estimated that the total cost of graduate medical education is now in excess of four billion dollars annually.

Financial support from government for graduate medical education has been obtained through patient care funds, biomedical research grants, federal direct support, and state direct support. Patient care funds are the most significant source of graduate medical education financing. Medicare and Medicaid, since the onset of these programs in 1966, have accepted educational costs in one form or another as part of the reasonable costs of patient services. Direct graduate medical education support from the federal government comes primarily through the Veterans Administration Hospitals.

Government attention has been reinforced by teaching hospitals themselves. Since much of the education of physicians is currently financed through patient service charges, teaching hospitals are concerned that the educational costs they incur may penalize them in competition with non-teaching hospitals for declining patient populations in a cost-conscious environment. Their concerns have been increased by federal policy changes imposing new constraints on Medicare payments for the cost of graduate medical education. The national policy regarding graduate medical education has as its goal assurance of an adequate future supply of well-prepared physicians for its citizens.

Residents engage in multiple activities: they learn, teach other house staff and undergraduate students, perform valuable care to patients, assist senior attending physicians and surgeons, and occasionally participate in research protocols. Studies by the Institute of Medicine suggest that over two-thirds of their effort is involved in caring for patients or in patient care

related activities.

There is considerable disagreement at the public policy level as to whether the federal government, states, or the university should actively reduce enrollment in medical schools or whether market forces will bring about the reductions. The actions of certain large states in modifying their graduate medical education policies and restricting training opportunities or restricting medical school class size could have marked impact on other states. The factors that influence the need for physicians, their distribution, and the supply of projections are complex, subject to rapid change and often controversial. The demography of population leads us to expect a shrinking annual pool of college graduates well into the 1990's, which will provide a smaller applicant pool for medical schools. In addition, the opportunity costs of medicine as a profession are changing with predictions of less autonomy and lowered incomes from practice. Students are responding to these changes by seeking other professional fields.

Kentucky now enrolls 219 students per year in its two medical schools. This is a decrease of 11% in the enrollment from four years ago. There are currently 194 first-year GME positions in Kentucky: 102 at the University of Louisville programs, 80 at the University of Kentucky programs, plus six in Covington and six in Madisonville. Of these 194 positions, 62% are in the Primary Care specialties of Family Practice, Pediatrics, Internal Medicine, and OB/GYN. The total GME positions in Kentucky are 890: 415 at the University of Louisville, 339 at the University of Kentucky, and 36 in the two Family Practice Programs at Covington and Trover Clinic. Of these total 890 positions, 35% are in the Primary Care specialties, and 9% are in the Primary Care specialty of Family Practice (78 positions).

The GMENAC report recommended that the Primary Care specialties

should comprise about 45% of the physician pool. The positions offered nationally in graduate medical education programs at the first-year level consists of 10% Family Practice, 24% Internal Medicine, 8% Pediatrics, and 6% OB/GYN, which totals 48%. It must be remembered, however, that ultimately 60% of physicians training in Internal Medicine will continue on to subspecialize in fields such as Cardiology, Oncology, etc. and, therefore, will not be part of the Primary Care pool. In Wisconsin, 16% of the training positions are in Family Practice, and a total of 48% are in Primary Care. A study by the New York State Commission on Graduate Medical Education reported that Primary Care comprises 48% of the graduate medical education positions in New York. However, Family Practice comprises only 5% of the GME positions.

Additional interesting data looks at the total number of medical school graduates in a state compared with the number of first-year postgraduate positions available in the state. If a state has more postgraduate positions than students graduated, it is an importer of physicians at the GME level.

An example of an importer would be California, which has approximately 1,000 students graduating each year from medical school, yet has available 1,900 first-year GME positions. Therefore, they would import 900 physicians into GME positions from other sources. Kentucky has 219 students graduating from the two medical schools and 194 first-year GME positions available and is, therefore, an exporter of 25 of its graduates each year. Wisconsin is also an exporter with 30 fewer first-year GME positions than total number graduating.

The questions of who benefits from and who should pay for graduate medical education have been controversial. As house officer stipends have risen, the question of who will or should provide the funds to pay for them has become increasingly important to hospital administrators and



policy-makers alike. During the past 80 years, the resident has gone from an uncompensated apprentice to a paid student employee. Despite the finding of the National Labor Relations Board that house staff should be considered students, the fact remains that they provide a great deal of patient care for which the hospitals are reimbursed.

Are residents students, apprentices, employees or independent professionals? In her excellent discussion of the issues surrounding graduate medical education financing, Yoder notes the continuing ambiguity of the house staff's role in the hospital. If residents are students, should they pay tuition like other graduate students, or can one argue that residents' salaries are lower than the income that they could generate in private practice at the same stage of their careers so that, in effect, they are paying an implicit tuition in the form of foregone earnings? No matter how residents are classified, there is no doubt that house officers can and do provide a significant amount of patient care services. House officers spend an average of only 16% of their time in peer learning experiences. Medical schools and other health professional schools benefit from the teaching activities of house staff. Given a large proportion of house staff efforts in patient care, a case may be made for retaining the status quo with respect to using patient care revenues as a major source of financing for graduate medical education.

There are reasons to project increasing pressures on teaching hospitals as the federal government and some states tighten hospital payment policies. Medicare is gradually squeezing down on all hospitals, but most particularly teaching hospitals, where 1.6 billion dollars in savings is budgeted for FY 1987. In 1986 Congress passed new legislation which established a National Council on Graduate Medical Education to make recommendations on physician supply,

foreign medical graduates, and graduate medical education financing. The same law set new limits on Medicare's direct payments for residency training. This budget reconciliation law heralds the beginning of federal involvement in the regulation of physician supply. The above mentioned Council on Graduate Medical Education has already begun its deliberation and is charged with making recommendations to Congress. A key function of this council and a critical first step for all future policy decisions is to examine and insure the accuracy of existing data on supply and distribution of physicians. It is clear that the federal government will continue to play a major role in funding graduate medical education and most probably will be based upon the recommendations of the newly established Council on Graduate Medical Education. This funding will be closely tied to the supply and distribution of physicians in medical and surgical specialties and subspecialties.

Several state studies have been published during the past several years with a variety of findings and recommendations. The Physician Manpower in Oklahoma Study published in July 1986, recommended a decrease of 8% in enrollment (by two annual 4% increments) and a decrease in residency positions of 7%, plus a reallocation of positions into primary care specialties. California has taken a different approach and decreased over a five-year period, beginning in 1982, a total of 11% of their GME positions (500 positions). This was not based on any manpower data but was budget driven. The report of the New York State Commission on Graduate Medical Education made many recommendations. Their most sweeping was a decrease in the number of residency positions by 30% and rigid control of graduate medical education positions for foreign medical graduates. The study "Graduate Medical Education in Wisconsin," published in November 1986,

interestingly enough recommended keeping medical school enrollment and graduate medical education positions status quo.

Another very important recommendation in the Oklahoma report was that the state regents attempt to provide resources to Oklahoma public medical schools at a level at least at the national average for public medical schools. The report further stated that because future enrollments in Oklahoma medical colleges would probably be smaller than those in the immediate past, it would be precarious to reduce public funds to the schools on a per capita basis equal to the decline in number of students.

Costs do not increase on a one-to-one basis with the number of students enrolled, nor does a decrease in students necessarily call for a decrease in funds. Whether or not the educational budgets of medical schools should be decreased when enrollments decrease depends upon a number of factors, including accuracy of funding at the time enrollment decreases begin to occur. This is a very important concept that should be considered by any state or school contemplating decreasing medical school enrollment.

The mounting pressures on graduate medical education come at an opportune time for the future health of residency training. The system has undergone little in the way of basic alterations since shortly after World War II. Its principle change has been to produce greater numbers of physicians more specialized than is probably warranted by the medical needs of U.S. citizens. The organizational structure of almost any human enterprise seldom goes seriously unchallenged for as long as half a century, and it is neither surprising nor unsettling that graduate medical education is now in possible need of revamping. The virtues of graduate medical education must be preserved, yet accommodate the changing context of cost consciousness, physician supply, and specialty distribution. Graduate medi-

cal education is a national resource with obvious benefits. There are certainly aspects of interrelated problems that I have not discussed. One of the most important concerns medical care for the indigent and the uninsured. This is one of the major societal problems at the present time and it impacts both medical manpower issues and graduate medical education issues.

In summary, I have attempted to furnish you with some of the available

data on physical manpower and how that issue interfaces with graduate medical education. In addition, I have discussed some of the recommendations by states as they have studied indepth the issues of physician supply and graduate medical education. I have purposely not offered any solutions but, perhaps, have furnished you with some food for thought.

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**References:** 1. Feighner JP, et al. *Psychopharmacology* 61:217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 3. Dixon R, Cohen J. *J Clin Psychopharmacol* 3:107-109, Apr 1983.

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**Warnings:** Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

**Precautions:** Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

**Adverse Reactions:** Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

**Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

**Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

**Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

**Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

**Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

**Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

**Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, block tongue.

**Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

**Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Overdosage:** Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**Dosage:** Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol DS (double strength) Tablets, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol Tablets, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

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# Strategic Plan U of L School of Medicine

David Weigman, Ph.D.  
Assistant Dean for Academic Affairs

Strategic planning at the University of Louisville was initiated by President Donald Swain in the fall of 1983. The process recognized that resources are limited and that maximum effectiveness can only be made by careful planning and prioritization. From late 1983 until early 1985, committees made up of faculty, staff, students, and community leaders met and developed a general plan for the University. The various schools within the University, including the School of Medicine were then directed to develop detailed strategic plans. Specifically the School of Medicine was charged to:

1. Examine the **socioeconomic environment** that the School faces and categorize the implications of the forces involved as opportunities or as constraints and threats;
2. identify and analyze personal and institutional **values** that ought to be considered in strategic planning;
3. evaluate the relative **strengths and weaknesses** within the School of Medicine; and
4. determine and provide a statement of the **mission** of the School, the **elements of distinctiveness** of the School, and the **individuals and groups who are served** by the School, and then finally, established **priorities** for the five-year time period, 1986-1991.

Three separate committees of faculty and staff were established from departmental nominees to complete

the first three parts of the charge. Then the Dean of the School of Medicine assisted by another committee of faculty and staff took all reports and multiple other inputs and responded to the last part of the charge, which culminated in targeted **priorities**. Throughout the process, wide constituency input was sought through interviews, distribution of drafts, and open forums. The following report represents the results of this overall process.

## I. Socioeconomic Environment

The Environmental Analysis Committee analyzed the external environment for the School of Medicine in terms of opportunities and constraints or threats during the next five years. Factors analyzed included: supplies/suppliers, economic/financial considerations, technology, demographic and social trends, research funding, political/legal environment, higher education, business perceptions, and physician supply. The Committee identified five important environmental factors:

1. The relationship with Humana, Inc. is an opportunity as far as sharing resources. The relationship could be a constraint, however, if it disrupts patient referral patterns or ties with other hospitals.
2. The School still receives more qualified applicants for admission than are needed to fill the class. In the last few years, however, the trend both locally and nationally has been down. Demographics suggest that this

trend will continue over the next five years.

3. At the national level the number of physicians per capita may have increased beyond the optimal level. This is not true in selected geographic areas and specialties in Kentucky and, thus, represents an opportunity.
4. Research funding for the School needs to increase. It does not appear that national or state allocations to research will increase. The School of Medicine needs to take a more active role in promoting research, including seeking support from non-governmental sources.
5. A major legal concern for the School is the structure for dealing with potential malpractice settlements. Nationally, malpractice settlements are becoming much larger.

## II. Values

The Values Committee of the School of Medicine studied many issues—some esoteric and some quite pragmatic. They brought in outside opinions and materials and studied a number of reports and documents.

The Committee soon realized that there are many values which are self-evident and which should, in reality, probably be considered as givens. These values would include **excellence in research, excellence in teaching, excellence in service, recruitment of outstanding faculty, staff and students, outstanding opportunities for personal development of faculty, staff and**



students, full exercise of academic rights and freedom, high academic standards, collegial governance, outstanding facilities, fair and equitable compensation, outstanding public image, high ethical concern, and effective cooperation. It is healthy and important to reaffirm conviction in these values and others like them; however, these values are so obvious and idealistic that simply stating them probably does little to aid the strategic planning process. Realizing this, the Committee took its analysis one step further. In the real world, values often run headlong into realities. Also, in situations of limited resources, values tend to compete with each other for priority. With these ideas in mind, five values have been identified which are believed to be of major importance to the vitality and future of the School. These values are:

1. There should be a high and balanced emphasis on both teaching and research. This balance, although desirable, may not be achieved within each faculty member, but should be achieved at the Department and School levels. Opportunities and rewards should reflect this balanced emphasis.
2. Clinical service is integral to the educational and research missions of the medical school and makes an important contribution to the urban community and to the state.
3. Recruitment and retention of quality minority students should receive increased emphasis. This increased emphasis would relate directly to our urban mission.
4. An increase in humanism (a respect for others and a concern for their welfare, consciousness of moral and ethical issues, etc.) at all levels (admissions, curriculum, hiring, promotion, bedside, role models, etc.) should be emphasized. This emphasis is critical for the development of

the caring and concerned physician.

5. Institutional planning needs increased emphasis and as such should be built into the permanent School structure. Only by high quality and continuous planning and review can the tasks and challenges of the future be adequately met.

### III. Strengths and Weaknesses

The Strengths and Weaknesses Committee of the School of Medicine was charged to gather and analyze information on each program in the School of Medicine. Many reports, databases, interviews, etc. were used in these assessments. The Committee made very candid, specific and constructive reports to each departmental chairman and to the Dean of the School of Medicine. In general, the Committee concluded that a great strength of the School of Medicine is the quality and quantity of service that it provides to the community and the University. Overall teaching is above average on a national comparison. On the other hand, substantial improvement is needed in the area of research productivity. Basic science departments need more aggressive grant procurement and research activity. In the clinical departments, some of the clinical service/training/research programs are very good and have national reputations. A number of departments, however, need further strengthening and the development of research programs. When resources are inadequate or maldistributed or there is over-expansion of programs, the service commitments can consume inordinate time at the expense of research activities. The most successful programs appear to use a balanced approach whereby teaching is nurtured by research, and both, in turn, are facilitated by service activities.

### IV. Mission

The Council on Higher Education's Mission Statement for the University

of Louisville specifically addresses the mission of the School of Medicine.

"The University of Louisville shall continue to offer those doctoral degree and postdoctoral programs related to the health sciences."

—These programs are heavily research oriented. They provide needed expertise for urban and statewide concerns.

"The University of Louisville will continue to share with the University of Kentucky a statewide mission in medicine. . ."

—Undergraduate, postgraduate, and continuing medical education will be offered.

—The base of medical knowledge will be expanded through scholarly medical research.

—Medical and surgical services will be offered to the urban community and to the state.

"In the health sciences, close coordination with the University of Kentucky must be maintained."

—Programs will be coordinated and directed in a cooperative way so that the needs of the state are efficiently and effectively met.

### V. Elements of Distinctiveness

The University of Louisville School of Medicine has the advantage of being located in the population center of Kentucky. This location provides access to the large patient population necessary for the training, research and service programs of the School of Medicine. Louisville has an expanding health care industry which services not only the metropolitan area, but also the entire state and, in some areas, has attained national and international recognition. This mission of the University of Louisville School of Medicine and its relationship to the health care industry in the city provide the following distinctive elements:

1. The School of Medicine has a long tradition of outstanding faculty and a rich heritage as the

- oldest medical school west of the Allegheny Mountains.
2. The School of Medicine has modern basic sciences facilities and outstanding new clinical facilities.
  3. The School of Medicine is one of only two medical schools in the state and is located in one of the two designated research institutions. Medical research provides a visible contribution to the community and is nationally recognized. The School of Medicine is the largest contributor to research within the University of Louisville.
  4. The School of Medicine's instructional, research and service programs have strong support from numerous affiliated hospitals in the Louisville area. The association between these hospitals and the School of Medicine is a unique strength since it integrates a major portion of the city's expanding health care industry into the Academic Health Center.
  5. The School of Medicine through its unique relationship with Humana, Inc. is able to generate additional funding and develop quality programs while addressing the indigent care needs of the community and retaining access to a large number of teaching patients.
  6. The School of Medicine has an opportunity to cooperate with industry in economic development since health services represent a significant portion of the local economy.
  7. The School of Medicine enjoys a high degree of credibility and support in the community including strong support from alumni and practicing physicians of which approximately 1,000 are voluntary faculty members.
  8. The School of Medicine has access to private financial support

from the community and through the University's "Quest for Excellence" is already the recipient of eight fully Endowed Chairs and has partial support for several others.

9. Although there is a perceived excess of physicians nationally, the Commonwealth of Kentucky has many medically underserved areas, which are particularly in need of primary care services. The School of Medicine, as the major source of new physicians for Western Kentucky, has a responsibility to assist in addressing physician manpower needs.
10. In addition to the M.D. program, the School of Medicine offers high quality postgraduate, postdoctoral and continuing education programs in the clinical and basic science disciplines.

### VI. Individuals and Groups Served

The School of Medicine serves a broad constituency through its programs of instruction, research and service. This includes service to the profession as a whole and to the Commonwealth of Kentucky through students, patients, hospitals and organizational groups. More specifically the School of Medicine:

1. Serves the citizens of the Commonwealth by providing physicians and scientists and by rendering direct health care. The School also supports health care industries and participates in research and community projects. In addition, the School of Medicine provides personal and consultative services to a broad spectrum of hospitals, health organizations and both private and public health providers.
2. Has a primary responsibility to its students. The students fall into the following categories: undergraduate medical students,

graduate students in the health sciences, resident physicians in clinical departments, postgraduate fellows and practicing physicians through continuing medical education. There are also ancillary instructional responsibilities to students in dentistry, dental hygiene, nursing and allied health.

3. Provides support to alumni through continuing medical education, library resources and statewide consultative services.
4. Serves a variety of professional groups and associations both nationally and locally. These include the Jefferson County Medical Society and the Kentucky Medical Association.
5. Serves the community as a responsible steward of donated funds provided through charitable efforts including bequests and Endowed Chairs.

### VII. Priorities

Based on careful study and all of the above considerations, eight Priority Areas were established for the School of Medicine's Strategic Plan. Implementation of the Plan began on July 1, 1986.

**Priority Area #1 — Improve Overall Quality:** An important goal in this area has been to emphasize affirmative action in the recruitment and retention of faculty, staff and students. Thus far, several new black faculty members have been hired and a scholarship program has been developed for minority students.

The need to improve computer facilities and utilization have been targeted. Based on planning, computer workstations are being placed throughout the school and library and the use of computers is beginning to be integrated into the curriculum.

The Plan also includes the establishment of a new scholarship program which would be awarded exclusively on the basis of academic excellence. Such a program would contribute to



the overall intellectual environment and should help the School to maintain a high quality pool of applicants for admission.

**Priority Area #2 — Increase Emphasis on Research:** Major progress in research can be accomplished by building upon existing strengths. The Center for Applied Microcirculatory Research has recently been established and funded. Also, infant heart transplantations are being conducted at Kosair Children's Hospital and a transplantation agreement has been established with Jewish Hospital.

The School is committed to establishing core facilities for major research equipment. These facilities will, by their design, have multiple users and, thus, will provide an efficient way to increase research productivity. Recently, two electron microscopes, flow cytometry equipment, and an amino acid sequencer has been acquired for these core facilities.

Plans are underway to build a new animal care facility and to reorganize its administration. These steps are necessary to augment research productivity and at the same time to assure humane care and treatment of animals. In addition, it is anticipated that an Associate Dean for Research will be appointed and will be charged with coordinating and facilitating the School's research efforts.

**Priority Area #3 — Enhance the Quality of Instruction:** The demands on medical education are increasing in both magnitude and complexity. To meet these demands and to take advantage of the latest technologies an Office of Medical Education is being established. This office will have diverse functions such as assisting faculty in the use of computer aided instruction and helping students to acquire the self-learning skills that they will need throughout their medical careers. Also a separate Honors Program is being developed to attract highly qualified students and

provide them with an enriched curriculum.

It is clear that a number of medical areas, including health promotion/disease prevention, nutrition, geriatrics and humanistic medicine, need to receive increased emphasis. To focus on some of these areas a recent program has been expanded to present a week-long orientation for new students emphasizing nutrition, stress management, exercise, etc. The Department of Family Practice has developed a Physician Preceptor Program in which freshman and sophomore medical students spend a semester with a local physician studying the development of values and the physician/patient relationship.

**Priority Area #4 — Stress the Urban Mission:** The School of Medicine will continue to provide medical care to the uninsured and indigent citizens of Louisville and Jefferson County. Last year the faculty of the School of Medicine provided over \$13 million in unreimbursed medical care. The School recently participated on a Task Force on Outpatient Indigent Care appointed by the County Judge.

**Priority Area #5 — Make the Campus More Welcoming, Friendly, and Service-Oriented:** The School of Medicine must be open to, and provide services for, students, alumni, area physicians and the general public. For students, counseling opportunities will be increased through the Office of Student Affairs and the soon-to-be-established Office of Medical Education. Presently students are counseled for residency and career choices, course selection, academic difficulties, personal problems and financial aid. Last year, the School administered the distribution of \$2.7 million in student financial aid.

For alumni and area physicians Continuing Medical Education (CME) programs were presented last year to over 9,000 attendees. Plans are to expand CME programs into new areas. To increase communication and flow of information between the medical

community and the School, representatives of the Medical Alumni Association and the Jefferson County Medical Society have been placed on the Council of the School of Medicine. In addition, plans have been developed to involve the medical community in the year-long celebration of the Sesquicentennial Anniversary of the School of Medicine.

For the general public a major goal is to continue to improve the delivery of inpatient and outpatient medical care. The faculty also provides health information through numerous and varied media activities. Personnel is being added to improve the coordination and effectiveness of these activities. Finally, plans are being developed to construct an Information Center and to improve the signage in the area around the School of Medicine.

**Priority Area #6 — Adapt to Change Quickly and Responsibly:** The University of Louisville together with the University of Kentucky provide major medical programs for the state. Thus, if medical needs are to be met in a timely and effective manner, the efforts of the two schools must be coordinated. To facilitate this interaction representatives of both schools meet regularly as the U of L/UK Health Sciences Coordinating Committee. Recent accomplishments of this process include: joint federal spending for Area Health Education Centers (AHEC's) in rural Kentucky, approval of a statewide organ procurement agency (Kentucky Organ Donor Affiliates, Inc.), federal funding to the University of Kentucky for a joint Systolic Hypertension in the Elderly Program (SHEP).

It is also important that the two schools respond to physician manpower needs of the state, including total number of physicians, physicians needed in various specialties and subspecialties, and the geographical distribution of physicians. To this end both schools are participating in a

## Strategic Plan—Weigman

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Kentucky Medical Association physician manpower study.

**Priority Area #7 — Improve the Effectiveness of Programs and Management:** Departmental Chairmen are key to effective programs and ten strong new chairmen have been added in the last six years. At the time this Strategic Plan was developed, five permanent departmental chairmen positions were open. Since then three outstanding individuals were recruited and appointed as chairmen and in the very short time since their arrival their departments (Anatomy, Biochemistry and Ophthalmology) have moved forward markedly.

The Plan also calls for the reorganization of the Office of Vice President for Hospital Affairs and Dean of the School of Medicine to facilitate the development of a strong academic health center. Thus far, a Director of Planning has been appointed and a revised organization chart has been developed.

Another goal in this area is to renovate the remaining buildings of the Louisville General Hospital. Architectural planning has progressed, to include possible phasing of the

renovation. Also historical restoration of the part of the building facing Chestnut Street is being considered. Funding remains to be identified.

Finally, an effective method for dealing with malpractice liability must be defined and implemented. A University ad hoc task force has been appointed to study the issues and make recommendations.

**Priority Area #8 — Attain Increased Institutional Standing and Recognition:** Through the University-wide "Quest for Excellence" the School of Medicine received a number of Endowed Chairs. These chairs will allow the School to attract individuals of outstanding quality and international reputation. The goal then is to recruit and hire faculty for these chairs, and if possible obtain additional chairs. Thus far, one chair is occupied, the Lion's Eye Research Professorship, by Doctor Christopher Paterson. Active searches are underway for the Endowed Chair positions in Biochemistry, Hematology, Family Practice and OB/GYN.

Another goal is to use any resources which become available via the Humana relationship to enhance

selected programs. These resources, thus far, have been used to strengthen several basic science departments including Anatomy and Biochemistry, while enhancing several clinical areas.

A final goal is to maintain or enhance current hospital affiliations and to increase the number of affiliations, as appropriate, on the basis of academic need. Currently negotiations are underway to revise affiliations and to establish new affiliations.

### VIII. Conclusion

As discussed much earlier, Strategic Planning is an ongoing and dynamic process. As some goals are accomplished and the environment changes, the Plan must change also. Thus, the process requires periodic assessment and redirection. The Plan and the process are optimistic and ambitious, but are believed to be realistic. They provide a reasoned set of goals and directions which should move the School of Medicine and the associated medical community to a higher level of performance and accomplishment.

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For your brochures or other information about Lithotripsy and our kidney stone treatment program, call CAMC: in West Virginia at 1-800-654-0159; from out of state, call 304-340-7315.

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Charleston Area Medical Center  
We Care For West Virginia



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AMERICAN PHYSICIANS LIFE

BATES DRIVE  
P.O. BOX 281  
PICKERINGTON, OHIO 43147  
1-800-742-1275

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

**WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

**Precautions:** The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin (ACTH)). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

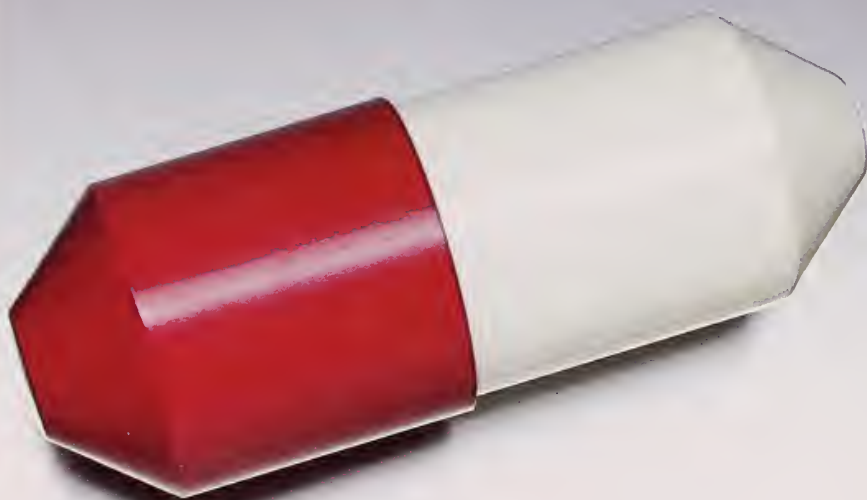
**Supplied:** 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BRS-DZ:L42

# In Hypertension\*... When You Need to Conserve K<sup>+</sup>

## Remember the Unique Red and White Capsule: Your Assurance of SK&F Quality

Serum K<sup>+</sup> and BUN should be checked periodically (see Warnings and Precautions).



Potassium-Sparing  
**DYAZIDE®**  
25 mg Hydrochlorothiazide/50 mg Triamterene/SKF

Over 20 Years of Confidence

a product of  
**SK&F CO.**  
Carolina, P.R. 00630

The unique  
red and white  
Dyazide® capsule:  
Your assurance of  
SK&F quality.





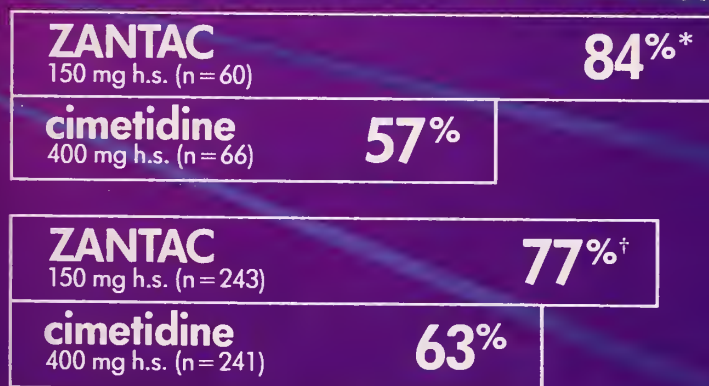


# A BETTER CHANCE FOR **AN ULCER—**

Well-controlled clinical trials confirm:  
**ZANTAC 150 mg h.s. significantly superior to  
cimetidine 400 mg h.s. for maintenance therapy  
in healed duodenal ulcers.**

# FREE FUTURE

## Percent of patients ulcer-free after 1 year of therapy



\*P = 0.01    †P = 0.0004    % life-table estimates

All patients were permitted prn antacids for relief of pain.  
Adapted from Silvis<sup>1</sup> and Gough<sup>2</sup>

These two trials<sup>1,2</sup> used the currently recommended dosing regimen of cimetidine (400 mg h.s.) and ranitidine (150 mg h.s.). A comparison of other dosing regimens has not been studied.

The studied dosing regimens are not equivalent with respect to the degree and duration of acid suppression or suppression of nocturnal acid.

The superiority of ranitidine over cimetidine in these trials indicates that the dosing regimen currently recommended for cimetidine is less likely to be as successful in maintenance therapy.

**Zantac<sup>®</sup> 150 h.s.**  
*ranitidine HCl/Glaxo 150 mg tablets*

**Glaxo** / **ROCHE**

See next page for references and Brief Summary of Product Information.

ZAN375 July 1987



**References:** 1. Silvis SE, Griffin J, Hardin R, et al: Final report on the United States multicenter trial comparing ranitidine to cimetidine as maintenance therapy following healing of duodenal ulcer. *J Clin Gastroenterol* 1985;7(6):482-487.  
2. Gough KR, Karman MG, Bardhan KD, et al: Ranitidine and cimetidine in prevention of duodenal ulcer relapse: A double-blind, randomised, multicentre, comparative trial. *Lancet* 1984;ii:659-662.

**ZANTAC® 150 Tablets**  
(ranitidine hydrochloride)  
**ZANTAC® 300 Tablets**  
(ranitidine hydrochloride)

**BRIEF SUMMARY OF  
PRODUCT INFORMATION**

The following is a brief summary only. Before prescribing, see complete prescribing information in ZANTAC® product labeling.

**INDICATIONS AND USAGE:** ZANTAC® is indicated in:

1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy and is maintained throughout a six-week course of therapy.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

**CONTRAINDICATIONS:** ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

**PRECAUTIONS:** Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy.

Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see **DOSAGE AND ADMINISTRATION**). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Although recommended doses of ZANTAC do not inhibit the action of cytochrome P-450 enzymes in the liver, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Lack of experience to date precludes recommending ZANTAC for use in children or pregnant patients. Since ZANTAC is secreted in human milk, caution should be exercised when administered to a nursing mother.

**ADVERSE REACTIONS:** Headache, sometimes severe, seems to be related to ZANTAC® administration. Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain have been reported. There have been rare reports of malaise, dizziness, somnolence, insomnia, vertigo, tachycardia, bradycardia, premature ventricular beats, and arthralgias. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

There have been rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Although controlled studies have shown no antiandrogenic activity, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Incidents of rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia, have been reported, as well as rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

**OVERDOSAGE:** Information concerning possible overdosage and its treatment appears in the full prescribing information.

**DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer:** The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

**Maintenance Therapy:** The current recommended adult oral dosage is 150 mg at bedtime.

**Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome):** The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

**Benign Gastric Ulcer:** The current recommended adult oral dosage is 150 mg twice a day.

**GERD:** The current recommended adult oral dosage is 150 mg twice a day.

**Dosage Adjustment for Patients with Impaired Renal Function:** On the basis of experience with a group of subjects with severely impaired renal function treated with ZANTAC, the recommended dosage in patients with a creatinine clearance less than 50 ml/min is 150 mg every 24 hours. Should the patient's condition require, the frequency of dosing may be increased to every 12 hours or even further with caution. Hemodialysis reduces the level of circulating ranitidine. Ideally, the dosage schedule should be adjusted so that the timing of a scheduled dose coincides with the end of hemodialysis.

**HOW SUPPLIED:** ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

**Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.**

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October 1986

**Glaxo**

Glaxo Inc.  
Research Triangle Park, NC 27709

Give five.

What you get back  
is immeasurable.

Just five hours a week. Just 5% of your income. It's not much to give, to the causes you really care about. But that small investment could change somebody's life. And it's hard to imagine a better return than that.





## Fall Board

As the date for the Annual Meeting of the Kentucky Medical Association and the Fall Board Meeting of the Auxiliary rapidly approaches, I extend a warm welcome to the spouses of all KMA members and invite you to attend our Board meeting to be held on Tuesday, September 15, at the Ramada Inn East/Bluegrass Convention Center in Louisville.

In addition to the meeting itself, we have planned a wonderful luncheon and some informative seminars. Even if you are unable to attend the Board Meeting, we hope that you will join us for our other activities. We will also have a hospitality suite, and members and nonmembers are invited to stop by and visit with friends from around the state.

The *tentative* schedule of Auxiliary activities:

### Monday, September 14:

Hospitality Room Open

8:00 A.M. — 5:00 P.M.

Registration

10:00 A.M. — 2:00 P.M.

The following committees will convene: Planning, Membership, Health Projects,

AMA-ERF, Finance, Executive

11:00 A.M. — 5:00 P.M.

Seminar: Membership

2:00 P.M. — 3:00 P.M.

### Tuesday, September 15:

Hospitality Room Open

8:00 A.M. — 9:00 A.M.

Registration

8:30 A.M. — 11:30 A.M.

Board Meeting

9:00 A.M. — 12:00 Noon

Luncheon & Fashion Show

12:15 P.M. — 2:00 P.M.

**“150 Years of Fashion” Commemorating the Sesquicentennial of the**

**University of Louisville School of Medicine**

Joseph's Silks of Many Colours and

Original Couturier Designs by Camille Morgan

Atlanta, Georgia

Kentucky A & B — Ramada

Seminar: Substance Abuse: Its Impact on the Physician's Family

2:00 P.M. — 3:00 P.M.

### Wednesday, September 16:

Hospitality Room Open

8:00 A.M. — 12:00 Noon

Seminar — AIDS Education:

Registration

8:30 A.M. — 9:00 A.M.

Morning Session

9:00 A.M. — 12:00 Noon

Lunch (On your own)

12:00 Noon — 2:00 P.M.

Afternoon Session

2:00 P.M. — 4:00 P.M.

Please watch the “Bluegrass News” for additional information and pre-registration form.

**Pam Potter**  
**President AKMA**



# CHANGING ADDRESS?

Please let us know at least  
two months before chang-  
ing your address.

Send new address to:

Journal of the Kentucky  
Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Ky. 40205

## **LIBRIUM®**

chlordiazepoxide HCl/Roche  
5-mg, 10-mg, 25-mg capsules

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Management of anxiety disorders; short-term relief of anxiety symptoms, acute alcohol withdrawal symptoms, preoperative apprehension and anxiety. Usually not required for anxiety or tension associated with stress of everyday life. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported at recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms (including convulsions) reported after abrupt cessation of extended use of excessive doses are similar to those seen with barbiturates. Milder symptoms reported infrequently when continuous therapy is abruptly ended. Avoid abrupt discontinuation; gradually taper dosage.

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Due to isolated reports at exacerbation, use with caution in patients with porphyria.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. **Oral—Adults:** Mild and moderate anxiety disorders and symptoms, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. **Geriatric patients:** 5 mg b.i.d. to q.i.d. (See Precautions.)

**Supplied:** Librium® (chlordiazepoxide HCl/Roche) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in boxes of 4 reverse-numbered cards of 25, and in boxes containing 10 strips of 10. Libritabs® (chlordiazepoxide/Roche) Tablets, 5 mg and 10 mg—bottles at 100 and 500; 25 mg—bottles at 100. With respect to clinical activity, capsules and tablets are indistinguishable.

P. I. 0286



Roche Products Inc.  
Manati, Puerto Rico 00701

In Kentucky, when you decide to prescribe Librium,

# To protect your decision...

Rx

*Do Not Substitute*

## You do this.

# Librium

brand of

5-mg, 10-mg, 25-mg capsules  
chlordiazepoxide HCl/Roche ©

**nobody does it better!**



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Please see adjacent page for a summary of product information.



### **FP, GP, PED**

Needed now to work with an unique, internationally respected rural health system network in Kentucky which includes a hospital, satellite clinics, a home health agency and a school of advanced nursing. A regional medical center is within 20 miles. The practice environment is stimulating—physicians and ARNP's work in joint practice teams; interaction with students is encouraged; the rural population presents a great range and intensity of medical problems.

The setting is in heavily-wooded mountains with a moderate 4-season climate. Seven state parks are within 80 miles.

Superior compensation/benefits package includes a guaranteed salary with incentives and malpractice. Call Deborah Pennington COLLECT at 1-502-897-2556.



## **CLASSIFIED**

All advertisements must be approved by the Board of Editors. Deadline is the first of the month two months preceding the month of publication. Charges for advertising are: 20¢ per word. Average word count: 7 words per line. \$5.00 minimum. Send payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

**EMERGENCY MEDICINE** physicians needed in southwestern Kentucky near the Kentucky Lake Area for a full time practice in the ER of 240-bed hospital. Potential earnings exceed \$80,000 and we procure professional liability insurance on your behalf. For additional information contact: Tom Baldwin, Coastal Emergency Services, Inc., 425 N. New Ballas Rd., Ste. 295, St. Louis, MO 63141; collect (314) 432-0210 or (800) 227-2533 outside Missouri.

**WESTERN KENTUCKY**—Seeking physicians for evening and weekend coverage in a low volume emergency department. Attractive schedule and compensation. Malpractice insurance provided. Contact: Emergency Consultants, Inc., 2240 South Airport Road, Room 31, Traverse City, MI 49684; or call 1-800-253-1795 or in Michigan 1-800-632-3196.

Two busy FP's seeking part time associate. Located within one hour of Lexington and 1½ hour from Cincinnati and N.E. Kentucky. Future full time position available if desired. No capital investment required. No management hassles. Send inquires to P.O. Box 32, Maysville, KY 41056

## *Provider Contracts Translates Contract Language Into "Plain English."*

There is growing concern from physicians over provider contracts they are being asked to sign. As a result, the KMA Committee to Investigate Changing Trends in Medicine and KMA legal counsel have reviewed several guides on contracts and have recommended the one developed by the Pennsylvania Medical Society which is now available through KMA. Comprised of a section on PPO contracts and a section on HMO contracts being developed, the guide includes a review of provider contracts in general; payment terms; malpractice exposure; open-ended obligations; claims processing; contract disputes and much more. It is specially written for physicians who need quick, comprehensive information about specific contract provisions. Numerous examples begin with typical language included in a contract and an explanation of its meaning.

# Provider Contracts:

# What you should know before you sign.

---

*"This contract may be amended from time to time by PPO if warranted by the PPO's financial circumstances."*

° Effect is to make entire contract open-ended.

---

*"Whenever physician provides a covered service to an HMO member, HMO shall pay physicians 90% of the physician's usual and customary fee for the service within 30 days after HMO approves the claim."*

° Disputes could arise regarding meaning of the phrase

*"usual and customary fee."*

° HMO's duty to pay physician is not triggered until HMO approves claim. No deadlines set for approval process.

---

*"Covered service—A service designated as covered under the applicable subscriber contract."*

° Covered services are open-ended if, as is typically the case, subscriber contracts can be adopted and amended without physician's approval.

° Creates potential identification problem. All subscriber contracts might not cover the same services. Open-endedness intensifies identification problem, particularly if subscriber contracts can be adopted and amended without even prior notice to the physician.

---

The contracting guide can be ordered directly from KMA.  
An order form is on the back.



# KENTUCKY MEDICAL ASSOCIATION

3532 Ephraim McDowell Drive

Louisville, Kentucky 40205

(502) 459-9790

## Provider Contracts: What You Should Know Before You Sign

### PART I

PPO Provider Contracts

KMA Member \$10

Nonmember \$25

Quantity

Amount Due

\$

### PART II

HMO Provider Contracts (available early July)

KMA Member \$10

Nonmember \$25

\$

\$

**TOTAL**

MAKE CHECK PAYABLE TO KMA

Please make your check payable to KMA and return it with this order form to:

Kentucky Medical Association

Committee to Investigate Changing

Trends in Medicine

3532 Ephraim McDowell Drive

Louisville, KY 40205

(Please print)

NAME:

ADDRESS:

city

state

zip

SPECIALTY:

YEARS IN PRACTICE:

WOULD YOU LIKE TO RECEIVE MEMBERSHIP INFORMATION ?

\_\_\_\_\_ YES

\_\_\_\_\_ NO

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## *1987 Annual Meeting Section*

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## *Official Call KMA Annual Meeting*

To the officers and members of the component and county medical societies of the KMA.

### **Meeting Place**

The Annual Meeting of KMA will convene on Tuesday, Wednesday, and Thursday, September 15, 16, 17, at the Ramada Inn East & Bluegrass Convention Center, Louisville. The first General Session will be called to order at 8:50 a.m., Tuesday.

### **The House of Delegates**

The first regular meeting of the House of Delegates will convene at 9:00 a.m., Monday, September 14, in the Julia Belle Room, Convention Center. The second regular business meeting will begin at 6:00 p.m., Wednesday, September 16, in the Julia Belle Room, Convention Center.

### **Registration**

The registration desk will be open for Delegates in the General Registration Area of the Convention Center at 7:30 a.m., Monday, September 14, and at 5:00 p.m., Wednesday, September 16. General registration will be held at the registration desk in the General Registration Area of the Convention Center from 7:00 a.m. until 5:00 p.m., Tuesday and 7:30 a.m. to 3:30 p.m. on Wednesday and Thursday.



---

## *KMA Officers 1986-87*



**Richard F. Hench, M.D.**  
**KMA President**



**Donald C. Barton, M.D.**  
**President-Elect**  
**Corbin**

Donald C. Barton, M.D., will be installed as President of the Kentucky Medical Association at the President's Luncheon on Wednesday, September 16.

Doctor Barton is a family practitioner from Corbin and a 1960 graduate of the University of Louisville School of Medicine. He interned at General Hospital in Louisville and began his practice in Corbin in 1961. He is a Diplomate of the Board of Family Practice.

Doctor Barton has served KMA as Delegate from 1977-79; KMA 15th District Trustee from 1978-84; AMA Alternate Delegate, 1983; Chairman of the Board 1983-84; and AMA Delegate from 1984-85. Doctor Barton is past President of the Whitley County Medical Society and served as Chairman of the KEMPAC Board from 1975-77.



**Vice President**  
**Thomas R.**  
**Watson, M.D.**  
**Louisville**

Thomas R. Watson, M.D., is an obstetrician-gynecologist from Louisville and a 1961 graduate of the University of Louisville School of Medicine. He is also a clinical assistant professor at the University of Louisville. Doctor Watson served as Chairman of KEMPAC for two years, has served as the JCMS Delegation Chairman to KMA for five consecutive years, and currently serves on the KMA State Claims and Utilization Review Committee and the Ad Hoc Committee on Professional Liability Insurance.



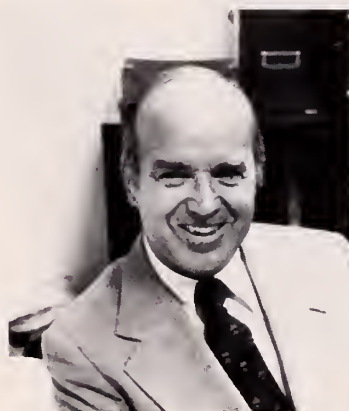
**Speaker of the House**  
**Peter C.**  
**Campbell, Jr., M.D.**  
**Louisville**

Doctor Campbell, an ophthalmologist, is Clinical Professor of Ophthalmology at the University of Louisville School of Medicine. He is past President of the Jefferson County Medical Society and a member of the American Academy of Ophthalmology and Otolaryngology, the Kentucky Academy of Eye Physicians and Surgeons, and is past President of the medical staff at Methodist Evangelical Hospital.



**Vice Speaker**  
**of the House**  
**Danny M.**  
**Clark, M.D.**  
**Somerset**

Danny M. Clark, M.D., is an obstetrician-gynecologist from Somerset and a graduate of the University of Cincinnati College of Medicine. Doctor Clark has served KMA as Delegate from 1974-80; 12th District Alternate Trustee from 1977-80; and 12th District Trustee from 1980-86. He serves as Chairman of the Committee on Maternal and Child Health. Doctor Clark is a fellow in the American College of Obstetricians and Gynecologists.



**Secretary-Treasurer**  
**S. Randolph**  
**Scheen, M.D.**  
**Louisville**

Doctor Scheen was KMA Secretary for eight years before his election as Secretary-Treasurer in 1975. A dermatologist, he is a graduate of the University of Louisville and University of Minnesota medical schools. Doctor Scheen serves the Association as a member of the Budget Committee and Judicial Council. He is a member of the American Academy of Dermatology and the Alumni Foundation of the Mayo Clinic, and is a regular participant on local television and radio programs, answering questions from the public on dermatology.



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## *KMA Delegates*



**Fred C.  
Rainey, M.D.  
Elizabethtown**

Doctor Rainey was elected as AMA Delegate in 1974, having previously served as President of KMA, Alternate AMA Delegate, and Board Chairman of KEMPAC. A 1955 graduate of the University of Tennessee College of Medicine, Doctor Rainey is a family physician. He is a member of the American Medical Political Action Committee, the Kentucky Academy of Family Physicians, and the American Academy of Family Physicians.



**Harold D.  
Haller, Sr., M.D.  
Louisville**

Elected an AMA Delegate in 1976, Doctor Haller has been active on the committee on Maternal and Child Health and the Committee on Health Care Costs. Doctor Haller graduated in 1963 from Bowman Gray Medical School, and has been in family practice since then. A charter member of the American Board of Family Practice, Doctor Haller also has served as President of the Kentucky Chapter of the American Academy of Family Physicians.



**Donald C.  
Barton, M.D.  
Corbin**

Donald C. Barton, M.D., a family practitioner, was elected AMA Delegate in 1984. A past Chairman of the KMA Board of Trustees, Doctor Barton served as KMA Delegate from 1977-79 and AMA Alternate Delegate in 1983. He is past President of the Whitley County Medical Society; past chairman of the KEMPAC Board; and was 15th District KMA Trustee from 1978-84. Doctor Barton is a 1960 graduate of the University of Louisville School of Medicine.



**Russell L.  
Travis, M.D.  
Lexington**

Doctor Travis is Associate Clinical Professor of Neurosurgery at the University of Kentucky School of Medicine and attending neurosurgeon at Central Baptist Hospital, Good Samaritan Hospital and Humana Hospital of Lexington. He is past President of the Kentucky Neurosurgical Society and is currently Chairman of the KMA Hotline Operating Committee. Doctor Travis has served as a member of the KMA Board of Trustees, KMA Membership Committee, and is Treasurer of the Kentucky Health Care Access Foundation. He is a 1962 graduate of the University of Louisville School of Medicine.

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# Journal Editors

## **A. Evan Overstreet, M.D., Editor Louisville**

Doctor Overstreet had served on the Editorial Board for more than six years before becoming Editor of *The Journal* in September 1977. An internist, Doctor Overstreet is a 1955 graduate of the University of Louisville School of Medicine. He is a member of the American Society of Internal Medicine, the American College of Physicians, the Transylvania Medical Society, and former President of the Louisville Society of Internists.

## **Paul C. Grider, Jr., M.D. Louisville**

Doctor Grider has served as Scientific Editor of *The Journal* since 1975. An internist, Doctor Grider was President of the Louisville Society of Internists from 1976 to 1977 and former President of the medical staff at Methodist Evangelical Hospital. Doctor Grider is a 1958 graduate of the University of Louisville School of Medicine.

## **Milton F. Miller, M.D. Louisville**

Doctor Miller is Associate Clinical Professor of Medicine at the University of Louisville School of Medicine. An internist, Doctor Miller has served as Assistant Editor of *The Journal* since 1976, has been on the Membership Committee of the Jefferson County Medical Society, and former President of the medical staff at Methodist Evangelical Hospital. He is a 1954 graduate of the University of Louisville.

## **Stephen Z. Smith, M.D. Louisville**

Doctor Smith has served as Assistant Scientific Editor for *The Journal* since 1977. A dermatologist, Doctor Smith is a 1971 graduate of Johns Hopkins University School of Medicine. He is a member of the KMA Claims and Utilization Review Committee, the American Academy of Dermatology, and the American Medical Association.

## **David L. Stewart, M.D. Louisville**

Doctor Stewart, a former Editor of the Jefferson County Medical Society Bulletin, is in his ninth year as Assistant Editor of *The Journal*. A psychiatrist, Doctor Stewart graduated from the University of Louisville in 1946, is a member of the American Psychiatric Association, and is Chairman of the KMA Committee on Impaired Physicians.

## **McHenry S. Brewer, M.D. Louisville**

Doctor Brewer is serving his fourth year as Assistant Editor of the *Journal of the Kentucky Medical Association*. A surgeon, Doctor Brewer attended the University of Louisville School of Medicine and was President of the Jefferson County Medical Society in 1972-73. He is a fellow of the American College of Surgeons and a member of the Southern Surgical Association.

## **Martha Keeney Heyburn, M.D. Louisville**

Doctor Heyburn joined *The Journal* in 1986 as an Assistant Editor. An ophthalmologist, Doctor Heyburn is a 1980 graduate of the University of Louisville School of Medicine. She has served the Jefferson County Medical Society as an Alternate Delegate to KMA, is a member of the American Academy of Ophthalmology, the American Medical Association, and has been a member of KMA since 1981.



## *KMA District Trustees*



**John D. Noonan, M.D.**  
First District



**Bob M. DeWeese, M.D.**  
Fifth District



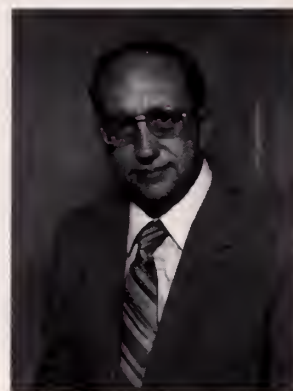
**Albert H. Joslin, M.D.**  
Second District



**Nelson B. Rue, M.D.**  
Sixth District



**J. Nicholas Terhune, M.D.**  
Third District



**Cecil D. Martin, M.D.**  
Seventh District



**Lucian Y. Moreman, II, M.D.**  
Fourth District



**William B. Monnig, M.D.**  
Eighth District





**Kelley G. Moss, M.D.**  
Ninth District



**Jerald M. Ford, M.D.**  
Thirteenth District



**Preston P. Nunnelley, Jr., M.D.**  
Tenth District



**James R. Pigg, M.D.**  
Fourteenth District



**Don E. Cloys, M.D.**  
Eleventh District



**Emanuel H. Rader, M.D.**  
Fifteenth District



**David C. Liebschutz, M.D.**  
Twelfth District





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## *New Trustees*

### **J. Nicholas Terhune, M.D.**

#### **Hopkinsville**

Jonathan Nicholas Terhune, M.D., is serving as Trustee from the 3rd District. An ophthalmologist, Doctor Terhune was a recipient of the Physician's Recognition Award in April 1987, and is a past President of the Pennyryle Medical Society. He holds a clinical appointment at Vanderbilt University Hospital for teaching and is on the staff of Jennie Stuart Medical Center and Nashville VA Hospital. Doctor Terhune received his medical degree in 1972 from Vanderbilt University.

### **Lucian Y. Moreman, II, M.D.**

#### **Elizabethtown**

Lucian Y. Moreman, II, M.D., is serving as Trustee from the 4th District. An OB/GYN, Doctor Moreman is a fellow of the American College of Obstetrics and Gynecology and serves on the Executive Committee of the Kentucky Obstetrical and Gynecological Society. He received his medical degree in 1972 from the University of Kentucky College of Medicine. He is also Assistant Clinical Professor OB/GYN at the University of Louisville School of Medicine.

### **David C. Liebschutz, M.D.**

#### **Danville**

David C. Liebschutz, M.D., is serving as Trustee from the 12th District. A surgeon, Doctor Liebschutz received his medical degree in 1968 from the University of Louisville School of Medicine. He is a fellow of the American College of Surgeons and has served as Counselor to the Kentucky Chapter. Doctor Liebschutz is President of the Medical Staff of Ephraim McDowell Hospital.

### **James R. Pigg, M.D.**

#### **Pikeville**

James R. Pigg, M.D., is serving as Trustee from the 14th District. A family practitioner and OB/GYN, Doctor Pigg currently serves as Chief of Staff at the Pikeville Methodist Hospital. He is a fellow of The American College of Obstetricians and Gynecology, serves as President of the University of Kentucky Medical Association and is a past President of the Pike County Medical Society. Doctor Pigg received his medical degree in 1976 from the University of Kentucky Medical School.

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# *KMA Delegates*

**Adair**

Billy Joe Parson, M.D., Columbia

**Allen**

Earl P. Oliver, M.D., Scottsville

**Anderson****Ballard****Barren**

Daryl P. Harvey, M.D., Glasgow  
William Marrs, M.D., Glasgow

**Bath**

Robin A. Byron, M.D., Owingsville

**Bell**

Charles C. Moore, Jr., M.D.,  
Middlesboro  
Kenneth W. Smith, M.D., Middlesboro

**Boone**

John D. Ammon, M.D., Florence  
Dwayne V. Smith, M.D., Florence

**Bourbon**

J. Roy Biggs, M.D., Paris

**Boyd**

Kenneth Hauswald, M.D., Ashland  
Howard B. McWhorter, M.D., Ashland  
Susan Hess Prasher, M.D., Ashland  
Bruce Stapleton, M.D., Ashland

**Boyle**

David C. Liebschutz, M.D., Danville  
Scott B. Scutchfield, M.D., Danville

**Bracken**

Milton L. Brindley, M.D., Augusta

**Breathitt****Breckenridge**

James G. Sils, M.D., Hardinsburg

**Bullitt**

James R. Cundiff, Jr., M.D.,  
Shepherdsville

**Butler**

Rosalie Padilla, M.D., Morgantown

**Calloway****Campbell-Kenton**

Charles F. Allnutt, M.D., Covington  
Thomas E. Bunnell, M.D., Ft. Mitchell  
Luis E. Davila, M.D., Ft. Thomas  
Steve W. Jennings, M.D., Crestview  
Hills  
Joel G. Kreilein, M.D., Erlanger  
Devinder S. Mangat, M.D., Crescent  
Springs  
Mark F. Pelstring, M.D., Covington

Jeffrey W. Russell, M.D., Ft. Thomas  
Donald A. Saelinger, M.D., Ft. Thomas  
Fred A. Stine, M.D., Highland Heights

**Carlisle****Carroll**

Jeffrey S. Bisker, M.D., Carrollton

**Carter****Casey**

Lewis E. Wesley, M.D., Liberty

**Clark****Clay**

William E. Becknell, Sr., M.D.,  
Manchester

**Clinton****Crittenden**

Gary V. James, M.D., Marion

**Cumberland****Daviess**

R. Wathen Medley, M.D., Owensboro  
Wayne C. Myers, M.D., Owensboro  
Donald R. Neel, M.D., Owensboro  
W. Neil Padgett, M.D., Owensboro  
Leslie M. Riherd, M.D., Owensboro

**Edmondson**

Omkar N. Bhatt, M.D., Brownsville

**Elliott**

Brown L. Adkins, M.D., Sandy Hook

**Estill**

Charles E. Terry, M.D., Irvine

**Fayette**

John R. Allen, M.D., Lexington  
William E. Blackburn, M.D., Lexington  
Peter P. Bosomworth, M.D., Lexington  
John W. Collins, M.D., Lexington  
John D. Cronin, M.D., Lexington  
Michael E. Daugherty, M.D., Lexington  
Harold T. Faulconer, M.D., Lexington  
J. M. Fox, M.D., Lexington  
Allen E. Grimes, Jr., M.D., Lexington  
Bill H. Harris, M.D., Lexington  
Ardis D. Hoven, M.D., Lexington  
Thomas M. Jarboe, M.D., Lexington  
Dennis B. Kelly, M.D., Lexington  
Paul G. Kyker, Jr., M.D., Lexington  
Edgar M. McGee, M.D., Lexington  
William D. Medina, M.D., Lexington  
William R. Meeker, Jr., M.D.,  
Lexington  
Andrew M. Moore, II, M.D., Lexington  
Franklin B. Moosnick, M.D., Lexington

John W. Poundstone, M.D., Lexington  
Charles R. Sachatello, M.D., Lexington  
John E. Trevey, M.D., Lexington  
James M. Vascik, M.D., Lexington  
Gary R. Wallace, M.D., Lexington

**Fleming****Floyd**

Peeter Jakobson, M.D., Prestonsburg  
Chandra M. Varia, M.D., Martin

**Franklin**

Harry Cowherd, M.D., Frankfort  
Joseph J. Dobner, M.D., Frankfort  
Willis P. McKee, M.D., Frankfort

**Fulton**

Robert T. Peterson, Jr., Fulton

**Gallatin****Garrard**

Paul J. Sides, M.D., Lancaster

**Grant****Graves**

Robert D. Fields, M.D., Mayfield

**Grayson**

Ray A. Cave, M.D., Leitchfield

**Green****Greenup**

Charles R. Lambert, M.D., Flatwoods

**Hancock****Hardin-Larue****Harlan****Harrison**

Don R. Stephens, M.D., Cynthiana

**Hart**

George Boeckman, M.D., Horse Cave

**Henderson**

Frank K. Sewell, Jr., M.D., Henderson  
Paul E. Moore, M.D., Henderson

**Hickman****Hopkins**

Wallace R. Alexander, M.D.,  
Madisonville  
James M. Bowles, M.D., Madisonville  
Charles R. Dodds, M.D., Earlington  
William H. Klompus, M.D.,  
Madisonville

**Jackson**



**Jefferson**

William Stephen Aaron, M.D., Louisville  
James G. Baker, M.D., Louisville  
Arnold M. Belker, M.D., Louisville  
Susan Berberich, M.D., Louisville  
Harold W. Blevins, M.D., Louisville  
Alan M. Bornstein, M.D., Louisville  
McHenry S. Brewer, M.D., Louisville  
Jerry B. Buchanan, M.D., Louisville  
Edward L. Callahan, M.D., Louisville  
Peter C. Campbell, Jr., M.D., Louisville  
E. Dean Canan, M.D., Louisville  
Alvin M. Churney, M.D., Louisville  
Milton Comer, M.D., Louisville  
Eugene H. Conner, M.D., Louisville  
Samuel L. Cooper, M.D., Louisville  
Larry D. Florman, M.D., Louisville  
Henry D. Garretson, M.D., Louisville  
Norman Glazer, M.D., Louisville  
S. Philip Grevier, M.D., Louisville  
Cecil L. Grumbles, M.D., Louisville  
Martha Keeney Heyburn, M.D.,  
Louisville  
James S. Holtman, M.D., Louisville  
Judy H. Holtman, M.D., Louisville  
John G. Hubbard, M.D., Louisville  
Walter I. Hume, Jr., M.D., Louisville  
Morton L. Kasdan, M.D., Louisville  
Lowell D. Katz, M.D., Louisville  
Arthur H. Keeney, M.D., Louisville  
Clifford C. Kuhn, M.D., Louisville  
Joseph E. Kutz, M.D., Louisville  
Aaron E. Lucas, M.D., Louisville  
Joseph C. Marshall, Jr., M.D., Louisville  
Russell T. May, M.D., Louisville  
Gorden T. McMurry, M.D., Louisville  
Roy J. Meckler, M.D., Louisville  
William M. Moses, M.D., Louisville  
David H. Neustadt, M.D., Louisville  
Lafayette G. Owen, M.D., Louisville  
C. Kenneth Peters, M.D., Louisville  
Robert G. Pope, M.D., Louisville  
Henry W. Post, M.D., Louisville  
James E. Redmon, Jr., M.D., Louisville  
K. Thomas Reichard, M.D., Louisville  
Ben A. Reid, Jr., M.D., Louisville  
Barton H. Reutlinger, M.D., Louisville  
Bernard F. Sams, Sr., M.D., Louisville  
Steven B. Self, M.D., Louisville  
Charles C. Smith, Jr., M.D., Louisville  
Stephen Z. Smith, M.D., Louisville  
Robert S. Tillett, M.D., Louisville  
Donald T. Varga, M.D., Louisville  
Will W. Ward, M.D., Louisville  
Thomas R. Watson, M.D., Louisville  
Lolita S. Weakley, M.D., Louisville  
Sam D. Weakley, M.D., Louisville  
Kenneth N. Zegart, M.D., Louisville

**Jessamine****Johnson**

Joseph H. Rapier, Jr., M.D., Paintsville

**Knott****Knox**

Roger A. Acosta, M.D., Barbourville

**Laurel**

Paul R. Smith, M.D., London

**Lawrence**

Lloyd Browning, M.D., Louisa

**Lee**

Arnold L. Taulbee, M.D., Beattyville

**Leslie****Letcher**

Mary M. McCord, M.D., Whitesburg

**Lewis****Lincoln**

Charles E. Crase, M.D., Stanford

**Livingston**

Stephen Burkhart, M.D., Salem

**Logan****Madison**

John M. Johnstone, M.D., Richmond  
William H. Mitchell, M.D., Richmond

**Magoffin**

Rosalie M. Gaurano, M.D., Salyersville

**Marion**

Salem M. George, M.D., Lebanon

**Marshall**

H. W. Ford, M.D., Benton

**Martin****Mason**

Audrey Spencer, M.D., Maysville

**McCracken**

William H. Brigance, M.D., Paducah  
Larry C. Franks, M.D., Paducah  
Ron L. Kelley, M.D., Paducah  
John E. McCracken, M.D., Paducah  
Luke D. Ross, M.D., Paducah  
Peter A. Ward, M.D., Paducah

**McCreary****McLean****Mead**

Raymond L. Mathis, D.O., Brandenburg

**Menifee****Mercer**

Thomas C. Dedman, M.D., Harrodsburg

**Metcalfe**

Lawrence P. Emberton, M.D., Edmonton

**Monroe**

James E. Carter, M.D., Tompkinsville

**Montgomery**

Lon E. Roberts, Jr., M.D., Mt. Sterling

**Morgan**

George Bellamy, M.D., West Liberty

**Muhlenberg**

William L. Miller, M.D., Greenville

**Nelson**

Fredricka C. Lockett, M.D., Bloomfield

**Nicholas****Ohio**

Eric Norsworthy, M.D., Hartford

**Owen****Owsley**

Mildred B. Gabbard, M.D., Booneville

**Pendleton**

Robert L. McKenney, M.D., Falmouth

**Pennyrile****Perry**

Eli C. Boggs, M.D., Hazard

**Pike****Powell****Pulaski**

Donald E. Brown, M.D., Somerset  
Danny J. Strunk, M.D., Somerset

**Robertson****Rockcastle****Rowan****Russell**

James E. Monin, M.D., Jamestown

**Scott**

Robert C. Culbertson, M.D., Georgetown

**Shelby-Henry-Oldham**

Edward G. Houchin, M.D., LaGrange  
Ronald E. Waldrige, M.D., Shelbyville  
David W. Wallace, Jr., M.D.,  
Shelbyville

**Simpson**

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**Spencer**

William K. Skaggs, M.D., Taylorsville

**Taylor**

Henry F. Chambers, M.D.,  
Campbellsville

**Trimble**

Roderick H. MacGregor, M.D., Bedford

**Union****Warren****Washington****Wayne****Webster**

David Wesley Brewer, M.D., Dixon

**Whitley**

Roemer D. Pitman, M.D., Williamsburg  
Carmel Wallace, M.D., Corbin

**Wolfe**

Paul F. Maddox, M.D., Campton

**Woodford****KMA Resident Physicians  
Section**

Anne W. Winterland, M.D., Louisville

**KMA Student Section**

Evelyn Montgomery, Louisville  
Baretta Casey, Lexington



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## Reference Committee Activity

Speaker Peter C. Campbell, Jr., M.D., Louisville, will assign all officers' and committees' reports and Resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9 a.m., Monday, September 14. A brief session for Reference Committee Chairmen will be held at 12:30 p.m., Monday, in Meeting Room A of the convention center. Any KMA member wishing to testify on any Resolution or report is urged to be present for the Reference Committee meetings which will be held at 2 p.m., Monday, September 14, in the meeting rooms of the convention center. These open sessions will last at least one hour in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony and write their reports to the House.

The Committees' recommendations will be presented at the final meeting of the House,

Wednesday evening, September 16, in the Julia Belle Room of the convention center.

As Speaker of the House of Delegates, Doctor Campbell is in the process of finalizing appointments to the six Reference Committees, Credentials Committee and Tellers Committee.

If your society has not yet submitted the name of your Delegate(s) to the Headquarters Office, you should do so immediately, as only those names recorded in the office can be considered for appointment to one of these important committees.

A complete listing of members who will be serving on the six Reference Committees and the location of the Reference Committee meetings will be published in the September issue of the *KMA Journal*.

Anyone desiring names of Reference Committee members before the September issue is published should contact the Headquarters Office.

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The  
UNIVERSITY of LOUISVILLE  
School of Medicine  
announces a gala performance  
featuring **The Louisville Orchestra**  
in celebration of  
the **Sesquicentennial**  
on



Tuesday, September 15, 1987 • 9:00p.m. • Kentucky Center for the Arts  
5 Riverfront Plaza  
Louisville, Kentucky

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Check the August **COMMUNICATOR** for information concerning complimentary ticket requests.

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# Elections

## Nominating Committee to Meet Monday, September 14

The KMA Nominating Committee will hold an open meeting at the close of the first meeting of the House of Delegates, Monday, September 14, in the Julia Belle Room, Convention Center. Any KMA member may confer with the Committee during this meeting.

The report of the Nominating Committee will be posted in the general assembly hall at the conclusion of the first general session, Tuesday morning, September 15.

Nominations may be made from the floor during the second meeting of the House of Delegates, Wednesday evening, September 16, in the Julia Belle Room, Convention Center. The House will vote on the nominees at this meeting.

Members of the Committee are: Sally S. Mattingly, M.D., Lexington, Chairman; Alvin M. Churney, M.D., Louisville; John E. McCracken, M.D., Paducah; Deborah L. McIntyre, M.D., Hazard; James O. Willoughby, M.D., Bowling Green.

Nominations should be sent before the Annual Meeting to the KMA Headquarters Office, Attention, Nominating Committee.

## House to Elect New Officers During Annual Meeting

KMA officers for the 1987-88 Association year will be elected by the House of Delegates at the close of its final meeting, Wednesday evening, September 16. Officers to be elected from the state-at-large are:

Office	Term
President-Elect	One Year
Vice President	One Year
Delegates to the AMA	Two Years
*Fred C. Rainey, M.D. Elizabethtown	
*Donald C. Barton, M.D. Corbin	
Alternate Delegates to the AMA	Two Years
*Wally O. Montgomery, M.D. Paducah	
*Harold L. Bushey, M.D. Barbourville	

Secretary-Treasurer

Three Years

\*S. Randolph Scheen, M.D.

Louisville

\*Incumbent

## Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and five Alternate Trustees at its second regular meeting, Wednesday, September 16. Nominations will be made by the Delegates from the electing Districts at a meeting following the first meeting of the House on Monday, September 14.

The Nominating Committee will report at the close of the first scientific session on Tuesday, September 15. Further nominations may be made from the floor at the final meeting of the House on Wednesday evening, September 16. All nominations are considered and acted upon by the Delegates at this final meeting.

Districts electing Trustees for three-year terms are: **Fifth District** (incumbent, Bob M. DeWeese, M.D., Louisville); **Sixth District** (incumbent, Nelson B. Rue, M.D., Bowling Green); **Eighth District** (incumbent, William B. Monnig, M.D., Edgewood); **Eleventh District** (incumbent, Don E. Cloys, M.D., Richmond); and **Fifteenth District** (incumbent, Emanuel H. Rader, M.D., Pineville).

Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are: E. Dean Canan, M.D., Louisville, 5th District; J. Michael Pulliam, M.D., Franklin, 6th District; Donald J. Swikert, M.D., Florence, 8th District; William H. Mitchell, M.D., Richmond, 11th District; and Paul R. Smith, M.D., London, 15th District.

Trustees in the 8th and 15th Districts are eligible for reelection, while the Trustees in the 5th, 6th, and 11th Districts have served two full, consecutive terms and are not eligible for reelection.

Alternate Trustees in the 8th, 11th, and 15th Districts are eligible for reelection, while the Alternate Trustees in the 5th and 6th Districts are not eligible for reelection.



# Annual Meeting Special Features



**Scientific Sessions** are scheduled for September 15, 16, and 17, at the Ramada Inn East Convention Center in Louisville. The theme for the 1987 scientific session is "Medical Excellence '87." Both the presentations and discussion periods will contribute to the continuing medical education of Kentucky's physicians.

**Twenty-One Specialty Groups** will hold meetings on the afternoons of September 15, 16, and 17. Beginning at 1:30 p.m. on Tuesday and Thursday and 2:15 p.m. on Wednesday, they will be held in the meeting rooms of the Ramada Inn East and Convention Center. Individual programs of specialty societies are listed in this issue. All general sessions will be held in the mornings. Specialty groups will meet all three afternoons with no general sessions scheduled during these specialty group meetings. All KMA members are invited to attend any specialty meetings.

**Scientific and Technical Exhibits** will display new medical products, services and techniques in the General Sessions area of the Convention Center during the 1987 Annual Meeting. Members and guests are urged to take the opportunity to view products of interest at the 30-minute intermissions scheduled during each general and specialty session.

**The KMA House of Delegates** will meet twice during the Annual Meeting. The first meeting of the House will be held at 9 a.m., Monday, September 14, in the Julia Belle Room, Convention Center. The final meeting will be held Wednesday, September 16, at 6 p.m., in the Julia Belle Room, Convention Center. Officers for the 1987-88 Associational year will be elected at the second meeting.



**D. M. GRIFFITH**  
1907

## 1987 Annual Meeting Honors Past President Daniel Mosley Griffith, M.D.

The 1987 Annual Meeting of the Kentucky Medical Association will be officially titled, "The Daniel M. Griffith Meeting" in remembrance of the 1907-08 President of the Association.

The tradition of honoring a past President of KMA and other distinguished physicians originated at the 1935 Annual Meeting.

Eugene H. Conner, M.D., Louisville, KMA Historian, has written a biography on Doctor Griffith that begins on page 487.

## The President's Installation & Awards Luncheon

will be held on Wednesday, September 16, in the Julia Belle Room, Ramada Inn East Convention Center. This year's guest speaker during the President's Installation & Awards Luncheon is Donald R. Kmetz, M.D., Dean of the University of Louisville School of Medicine. Dean Kmetz will be speaking on, "University of Louisville School of Medicine, A 150 Year Tradition of Medical Excellence." Special recognition will be made to those U of L graduates who have gone on to become Presidents of KMA. The luncheon will include the presentation of KMA awards and the installation of the 1987-88 President, Donald C. Barton, M.D., Corbin.

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## ***Daniel Mosley Griffith, M.D.*** ***1867–1959***

**T**he early years of the twentieth century were important historically for the medical profession and the lay public as well, for it was in these years that the medical profession became a functioning organized body of physicians. This formal institutionalization raised the standards of medical education and practice. As a professional group, physicians effected or helped effect the passage of laws relating to the protection of the health of every citizen, such as approved water supplies, safe sewage disposal, certified milk, pure foods and drugs, vital statistics, and the control of infectious diseases.<sup>1</sup>

Many devoted Kentucky physicians worked to organize county medical societies.<sup>2</sup> Regular society meetings were held to address current medical topics, to present problem cases and to discuss effective therapy. A number of these practitioners shared their talents with their fellows as officers in county, state, regional and national medical organizations.

The gentleman we pay homage to at this 1987 Annual Meeting is Daniel Mosley Griffith, M.D., who served as the 50th President of our State Medical Society during the year 1906–07<sup>3</sup> and 1907–08<sup>4</sup>—two consecutive terms.

He had been duly elected President at the Annual Meeting in Owensboro on 12 October 1906 and presided at the meeting of October 1907. A careful examination of the minutes of the House of Delegates for Tuesday, 15 October 1907 reveals that Henry Enos Tuley, M.D., of Louisville, presented the following Resolution:

Resolve: that the President-Elect be installed at the first general session following his election<sup>5</sup>

This Resolution was adopted which action necessitated Doctor Griffith serving another year so that the President-Elect could be installed in office at the next General Session on 7 October 1908; however, he only presented one Presidential Address!

It is in this milieu of organization of medical



societies, of improving public health measures, medical practice standards and medical education at all levels (undergraduate, graduate and continuing) that our honored former President D. M. Griffith, M.D., served.

Daniel M. Griffith was born on a farm in Daviess County, Kentucky, 19 September 1867, the son of Daniel Mosley Griffith (1826–1893) and Virginia (Todd) Griffith (1836–1883). There were ten children in the family. He was a great grandson of Isaac Shelby as his maternal grandmother was Elizabeth Shelby Todd.<sup>6,7</sup>

His early education was obtained in the public schools of Owensboro where he graduated from high school in 1885. He began the study of medicine in Owensboro under the preceptorship of an uncle, Charles Henry Todd, M.D. (1838–1916), who was the youngest grandchild of Governor Isaac Shelby. His preceptor had served the KMA as President in 1879. Griffith attended the Medical Department of Tulane University in New Orleans as had his preceptor some 27 years previously. Doctor Griffith received his MD from Tulane in 1888.<sup>8</sup>

After three years of establishing a general practice in Owensboro following the completion of his medical studies, Doctor Griffith embarked on a search for additional medical training. He went to London, England, where he spent a year as a clinical assistant at the Royal Ophthalmic Hospital. The following year he devoted to service and study in the London Throat, Nose and Ear Hospital. He returned to Owensboro in 1893



and established himself as a specialist in EENT. He became a Fellow of the American College of Surgeons in 1914.

Doctor Griffith contributed much of his time and talent to his medical community. He presented a number of papers concerning his speciality and on the organization of medical societies. He was apparently an able and sometimes eloquent speaker. His Presidential Address, "The Kentucky State Medical Association, Its Needs, Organization and Ambition,"<sup>9</sup> carefully and wisely addressed the interests and problems of the profession in 1907 (some of which still confront us today), such as, the prevention of contagious diseases, malpractice suits and a Medical Defense Fund, expert testimony, continuing medical education, organization of the profession for a unified effort for self-improvement and the betterment and protection of the health of the public.

While serving as Councilor to the KMA for the medical societies in the 12 counties of the 2nd Legislative District, he worked diligently with J.W. Ellis, M.D., and our 46th President, W.W. Richmond, M.D., in organizing the profession in that District.<sup>10</sup> Doctor Griffith was an active member of the Owensboro, the Daviess County, and the Ohio Valley Medical Society (President, 1905),<sup>11</sup> KMA and AMA. He was one of the organizers of the Kentucky EENT Society and had served as its President also. He also established and was V-P of Owensboro Training School for Nurses.

Soon after establishing a speciality practice in Owensboro, he married Miss Susan Herr (7 November 1885). Three children were born to them: Mildred Taylor, Mary Ridgely and Daniel M., Jr.<sup>12</sup>

During WWI, Griffith was appointed by President Woodrow Wilson to the National Board of Surgeons. He was a Knight Templar Mason, a member of the Elks and of the Knights of Pythias. He was a regular communicant of the Presbyterian Church.

On the occasion of his death on 9 October 1959 (age 92), the notice in the *KMA Journal*<sup>13</sup> erroneously gave his name as David Moseley Griffith which information was apparently gathered from Medical Register #1 of Daviess County Court Clerk's Office where he had registered his diploma for license on 3 October 1893.

He was most frequently identified in his lifetime by his initials, "D.M."

Doctor Griffith was deserving of the honors bestowed upon him in his active professional lifetime. He worked unceasingly for improvements in medical practice, education, public health and the professional relationships of physicians and lawyers. We need more of his kind to address the same or similar problems in 1987, the year we memorialize his service to succeeding generations of the physicians of Kentucky.

**Eugene H. Connor, M.D.**

**References** 1. There are numerous editorial comments in *KMJ* from Vol 1, 1903 on to the early 1930's concerning these topics. When there is an index to the *KMJ*, editorials may be listed by title under Editorial. Numerous minutes of the county medical societies will give titles of papers presented or topics discussed. These are not indexed. 2. W.W. Richmond, M.D., Arthur T. McCormack, Joseph N. McCormack, James Steele Bailey, M.D. (served as Permanent Secretary KMA 1886-1903), T. B. Greenely, M.D., among others made valiant, fruitful efforts to organize the KMA by organizing all county medical societies. Their reports as councilors are scattered throughout the early issues of the *KMJ*. 3. *KMJ* 4, 1100 (Jan) 1907. 4. *KMJ* 6, 582 (Oct) 1908. 5. *KMJ* 5, 48 (Dec) 1907. 6. Charles Kerr, Editor, *History of Kentucky*, The American Historical Society, Chicago and N.Y., 1922. Vol 3, 297. 7. M.Y. Southard and E. C. Miller, Editors. *Who's Who in Kentucky*, Standard Printing Co., Louisville, Ky., 1936. p. 168. 8. Daviess County Court Clerk's Office, Medical Register No. 1, diploma from Tulane University issued 28 March 1888, certificate of registration, 3 October 1893. 9. D. M. Griffith, M.D.: The Kentucky State Medical Association, its needs, organization and ambitions. *KMJ* 5, 7-10 (Nov) 1907. 10. *KMJ* 3, 757-758 (March) 1906. *KMJ* 3 ii (Feb) 1906 and *KMJ* 6, 556 (Oct) 1908. 11. *KMJ* 3, 697 (Jan) 1906. 7th Annual Meeting Ohio Valley Medical Assoc. 12. Interview by Marie K. Nanz of D.M. Griffith, M.D., 3 Nov 1938. Medical Historical Research Project, WPA. Original and microfilm in UL Kornhauser Health Sciences Library. 13. *JKMA* 57, 1393 (Nov) 1959.

1962

1987

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**Wallace G. Wilkinson (D) and John D. Harper (R)**  
Gubernatorial candidates for the Commonwealth of Kentucky

**September 14, 1987**  
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**Ramada Inn — BCC**  
**Louisville, KY**

*Reception 6:00 p.m. EDT*  
*Banquet & Program 7:00 p.m.*

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# ***1987 Annual Meeting (Program Summary)***

Kentucky Medical Association

September 13-17

Ramada Inn East/Bluegrass Convention Center-Louisville

## **Sunday, September 13**

- 9:00 am KMA Executive Committee Meeting
- 12:30 pm KMA Board of Trustees Meeting & Lunch
- 6:30 pm McDowell/Crawford Ball

Meeting Room G—BCC  
Meeting Room F—BCC  
Emerald Room—Big Spring Country Club

## **Monday, September 14**

- 7:30 am Registration
- 9:00 am First Meeting, KMA House of Delegates
- 11:00 am Auxiliary Committee Meetings
- 12:30 pm Luncheon, Reference Committee Chairmen
- 2:00 pm Reference Committee Meetings
- 6:00 pm KEMPAC Reception & Dinner

Registration Area—BCC  
Julia Belle Room—BCC  
Kentucky A—Ramada Inn  
Meeting Room A—BCC  
Various Meeting Rooms—BCC  
Reception—Meeting Rooms  
BCDE—BCC  
Dinner—Julia Belle Room—BCC

## **Tuesday, September 15**

- 7:00 am KEMPAC Board Breakfast Meeting
- 7:00 am Maternal Mortality Committee Breakfast & Meeting
- 7:00 am Registration
- 8:50 am Opening Ceremonies
- 9:00 am Auxiliary Fall Board Meeting
- 9:00 am Reference Committee Report Signing
- 9:00 am First Scientific Session
- 12:00 noon Luncheon Meeting, Executive Committee & Reference Committee Chairmen
- 1:30 pm Specialty Group Sessions....Various Meeting Rooms—BCC (Eight Specialty Groups will meet simultaneously at this time. Their programs begin on page 492.)

Kentucky A—Ramada  
Meeting Room H—BCC  
  
Registration Area—BCC  
General Sessions Area—BCC  
Meeting Room F—BCC  
Suite 1191—Ramada  
General Sessions Area—BCC  
Meeting Room J—BCC

## **Wednesday, September 16**

- 7:30 am Registration
- 8:20 am Second Scientific Session
- 12:00 noon President's Installation & Awards Luncheon
- 2:15 pm Specialty Group Sessions...Various Meeting Rooms—BCC (Five Specialty Groups will meet simultaneously at this time. Their programs begin on page 495.)
- 3:00 pm KMA Board of Trustees Meeting & Dinner
- 6:00 pm Second Meeting, KMA House of Delegates

Registration Area—BCC  
General Sessions Area—BCC  
Julia Belle Room—BCC  
  
  
Meeting Room F—BCC  
Julia Belle Room—BCC

## **Thursday, September 17**

- 8:50 am Third Scientific Session
- 12:00 noon KMA Board of Trustees Luncheon Meeting
- 1:30 pm Specialty Group Sessions...Various Meeting Rooms—BCC (Eight Specialty Groups will meet simultaneously at this time. Their programs begin on page 498.)

General Sessions Area—BCC  
Meeting Room G—BCC

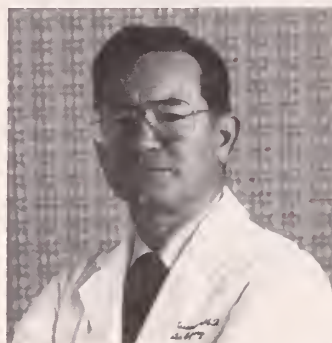
A 30-minute intermission has been scheduled during each morning Scientific Session and each afternoon Specialty Group Session for visiting Scientific and Technical Exhibits

*Kentucky Medical Association*  
**Scientific Program**  
*Daniel M. Griffith Meeting*

**MEDICAL  
EXCELLENCE '87**

**Richard F. Hench, M.D.**  
**KMA President, Presiding**  
Tuesday, Sept. 15, 1987  
Morning General Session  
General Sessions Area — Bluegrass  
Convention Center

- 8:15 am Movie—"First Comes Caring"  
8:50 am Opening Ceremonies  
9:00 am **"Immediate Breast Reconstruction Following Mastectomy"**  
Luis O. Vasconez, M.D., Birmingham, AL  
9:20 am **"Update on Immunizations"**  
Walter T. Hughes, Jr., M.D., Memphis, TN  
9:40 am **"The Evaluation of the Patient With Recurrent Urolithiasis"**  
Stephen N. Rous, M.D., Charleston, SC  
10:00 am **Intermission to Visit Exhibits**  
10:30 am **"Diagnostic Fine Needle Biopsy"**  
Michael D. Glant, M.D., Indianapolis, IN  
10:50 am **"Treatment Strategies for Dyspnea"**  
Donald A. Mahler, M.D., Hanover, NH  
11:10 am **"Reporting Results of Examinations to Management — Ethical and Practical Considerations"**  
Sidney Lerner, M.D., Cincinnati, OH  
11:30 am **"The Lonely Stand" — The Stress of Malpractice — Now a Major Stress of Practice**  
Nathan Donald Feibelman, M.D., Macon, GA  
11:50 am **"Magnetic Resonance Imaging of the Abdomen"**  
David Ling, M.D., Raleigh, NC



**Luis O.  
Vasconez, M.D.**  
Birmingham, AL

Professor of Surgery and Chief, Division of Plastic and Reconstructive Surgery, University of Alabama, Birmingham. M.D., 1962, Washington University, St. Louis, Missouri. Fellow, American College of Surgeons. Member, American Association of Plastic Surgeons; American Burn Association; American College of Surgeons; AMA; Society of Head and Neck Surgeons; and Plastic Surgery Research Council. Author of numerous publications.



**Walter T.  
Hughes, Jr., M.D.**  
Memphis, TN

Chairman and Member, Department of Child Health Sciences, and Director, Division of Infectious Diseases, St. Jude Children's Research Hospital; Professor of Pediatrics, University of Tennessee Center for the Health Sciences; and Lecturer in Pediatrics, Johns Hopkins University School of Medicine, Baltimore, Maryland. M.D., 1954, University of Tennessee College of Medicine. Member, Society for Pediatric Research (Emeritus); American Society for Microbiology; Infectious Disease Society of America; American Pediatric Society; and past President, Pediatric Infectious Diseases Society. Author of numerous publications.



**Ky OB/GYN Society — Ky Section  
ACOG**

Julia Belle Ballroom — BCC  
Tuesday, September 15, 1987

- 1:30 pm **"Standards of Care and RES IPSA Loquitur"**  
John Famularo, J.D., Lexington, KY
- 2:00 pm **"Informed Consent"**  
Elvoy Raines, J.D., Durham, NC
- 2:30 pm **"Risk Management in Obstetrics & Gynecology"**  
Jerry Breslin, Louisville, KY
- 3:00 pm **"Medical/Legal Implications of PPOs and HMOs"**  
Larry P. Griffin, M.D., Louisville, KY
- 3:30 pm Panel Discussion

**Ky Orthopedic Society**

Meeting Rooms D & E — BCC  
Tuesday, September 15, 1987

- 1:30 pm **"Femoral Rods & Distal Blocking Screws. Is One Enough?"**  
Greg Gleis, M.D., Louisville, KY
- 1:50 pm **"The Role of the Ky Orthopedic Society in the Malpractice Environment"**  
Thomas Brower, M.D., Lexington, KY & James Harkess, M.D., Louisville, KY
- 2:10 pm **"Conservative Treatment of Unstable First Fractures"**  
Donald Dewey, M.D. & Paul Nicholls, M.D., Lexington, KY
- 2:30 pm **Intermission to Visit Exhibits**
- 3:00 pm **"Antibiotic Impregnated Beads"**  
David Seligson, M.D., Louisville, KY
- 3:20 pm **"Infections and the Surgical Environment"**  
Merrill Ritter, M.D., Mooresville, IN
- 3:40 pm **"Orthopedic Access"**  
Joseph Dobner, M.D., Frankfort, KY



**Donald A. Mahler, M.D.**  
Hanover, NH

Director, Pulmonary Function Laboratory, and Chief, Pulmonary Section, Dartmouth-Hitchcock Medical Center, Hanover; Associate Professor of Medicine, Dartmouth Medical School, Hanover. M.D., 1972, Loyola University of Chicago, Stritch School of Medicine, Maywood, Illinois. President, New England Chapter, American College of Sports Medicine. Councilor, Eastern Section, American Thoracic Society. Member, Sports Medicine Committee, United States Rowing Association; American College of Chest Physicians; American Thoracic Society; American College of Physicians; and President, NH-VT Trudeau Society.



**Stephen N. Rous, M.D.**  
Charleston, SC

Professor and Chairman, Medical University of South Carolina; Chairman, Department of Urology, Medical University and Charleston County Hospitals. M.D., 1956, New York Medical College. Member, American Academy of Pediatrics; American College of Surgeons; American Fertility Society; AMA; Association for Academic Surgery; past President, Mayo Alumni Association. Author of numerous publications.

***Ky Chapter, American College of  
Chest Physicians***

Meeting Room A — BCC  
Tuesday, September 15, 1987

- 1:30 pm **"What Limits Exercise in COPD Patients?"**  
Donald A. Mahler, M.D., Hanover, NH
- 2:15 pm **"Silent Myocardial Ischemia"**  
Steven Glasser, M.D., Tampa, FL
- 3:00 pm **Intermission to Visit Exhibits**
- 3:30 pm **"Nitrate Therapy Re-evaluated"**  
Richard J. Katz, M.D., Washington, DC
- 4:15 pm **"Rational Therapy of Hypertension"**  
Theodore A. Kotchen, M.D., WV

***Ky Society of Pathologists***

Meeting Room I — BCC  
Tuesday, September 15, 1987

- 1:30 pm **"Fine Needle Aspiration Cytology: Procurement and Processing"**  
Michael D. Glant, M.D., Indianapolis, IN
- 2:30 pm **Intermission to Visit Exhibits**
- 3:00 pm **"Fine Needle Aspiration Cytology: Diagnosis of Palpable Masses with Emphasis on Breast and Thyroid"**  
Michael D. Glant, M.D., Indianapolis IN

***Ky Chapter, American Academy of  
Pediatrics***

Meeting Room G—BCC  
Tuesday, September 15, 1987

- 1:30 pm **"Sudden Death in High Risk Infants"**  
John Roberts, M.D., Louisville, KY
- 2:00 pm **"Attention Deficit Disorders"**  
Bernard Weisskopf, M.D., Louisville, KY
- 2:30 pm **Intermission to Visit Exhibits**
- 3:00 pm **"Sexually Transmitted Diseases"**  
Walter Hughes, Jr., M.D., Memphis, TN
- 3:45 pm **"Substance Abuse"**  
Robert Blair, M.D., Frankfort, KY
- 4:30 pm **Business Meeting**



**Sidney I. Lerner,  
M.D.**  
Cincinnati, OH

Associate Clinical Professor of Environmental Health, University of Cincinnati College of Medicine, and Member University-wide Graduate Faculty. M.D., 1957, University of Maryland. Member, Education Committee, American Academy of Occupational Medicine; Long-range Planning Committee of American Academy of Occupational Medicine; AMA; Ohio State Medical Association; American Industrial Hygiene Association. Author of numerous publications.



**N. Donald  
Feibelman, III,  
M.D.**  
Macon, GA

Director, Child/Adolescent Services, Charter Lake Hospital; Director of Child and Adolescent Services, Psychiatric Health Services, Macon; Assistant Professor, Child and Adolescent Psychiatry, Mercer School of Medicine. M.D., 1970, University of Mississippi Medical School, Jackson. Member, AMA; Medical Association, State of Alabama; Alabama Academy of Family Physicians; American Psychiatric Association; and KMA. Author of numerous articles.



### ***Ky Psychiatric Association***

Meeting Room F—BCC

Tuesday, September 15, 1987

- 1:30 pm **"Details on Research on Malpractice & Stress"**  
N. Donald Feibelman, M.D., Macon, GA and  
Catherine Martin, M.D., Lexington, KY
- 2:30 pm **Intermission to Visit Exhibits**
- 3:00 pm **"Tourettes Complex—An Update"**  
Janet Jones, M.D., Lexington, KY
- 4:00 pm **Business Meeting**

### ***Ky Chapter, American College of Surgeons***

General Sessions Area—BCC

Tuesday, September 15, 1987

- 1:30 pm **"Operative Cholangiography: A Key Technique in Biliary Surgery"**  
Eugene H. Shively, M.D., Campbellsville, KY
- 1:55 pm **"The Effect of Gallbladder Function on Duodenogastric Reflux"**  
William Cheadle, M.D., Louisville, KY
- 2:15 pm **"Breast Cancer"**  
Benjamin F. Rush, Jr., M.D., Newark, NJ
- 3:00 pm **Intermission to Visit Exhibits**
- 3:30 pm **"New Concepts in the Management of Gastrointestinal Bleeding"**  
William Strodel, M.D., UK, Lexington, KY
- 3:50 pm **"Value of Laboratory Investigation and Diagnosis of Acute Appendicitis"**  
Hossein Fallahzadeh, M.D., Somerset, KY
- 4:10 pm **"Comprehensive Approach to the Prune Belly Syndrome"**  
Mary E. Fallat, M.D., UL, Louisville, KY

### ***Ky Urological Association***

Meeting Rooms B & C—BCC

Tuesday, September 15, 1987

- 2:00 pm **"The Evaluation and Management of the Patient With Recurrent Urolithiasis"**  
Stephen N. Rous, M.D., Charleston, SC
- 2:45 pm **Pyleogram Conference**
- 3:15 pm **Intermission to Visit Exhibits**
- 3:30 pm **Pyleogram Conference**
- 4:00 pm **Business Meeting**



**Michael D. Glant, M.D.**  
Indianapolis, IN

Medical Director, Diagnostic Cytology Laboratory, Inc., Indianapolis; Associate Professor of Pathology, Indiana University School of Medicine. M.D., 1976, IU School of Medicine, Indianapolis. Member, American Society of Clinical Pathology; American Society of Cytology; Indiana Association of Pathologists. Medical Director, Cytotechnology Program, IU School of Medicine, 1980-present. Author of numerous publications.



**J. Kelley Avery, M.D.**  
Nashville, TN

Medical Director, Continuing Medical Education; Medical Staff, General Medicine, Saint Thomas Hospital, Nashville. M.D., 1948, University of Tennessee College of Medicine, Memphis, past President, Tennessee Medical Association. Member, Nashville Academy of Medicine; American Academy of Medical Directors; Tennessee Academy of Family Practice; AMA; Chairman of Board, Professional Standard Review Organization of Tennessee; and Governor's Task Force for Tort Reform - 1985.

**Thomas R. Watson, M.D.**

**KMA Vice President, Presiding**

Wednesday, Sept. 16, 1987

Morning General Session

General Sessions Area—Bluegrass Convention Center

8:20 am Opening Ceremonies

8:30 am **"Dealing With The Bad Result"**

J. Kelley Avery, M.D., Nashville, TN

The following members of a Reactor Panel will each be speaking on: **"The Impact of Risk Management on Your Specialty"**

9:30 am Merrill Ritter, M.D., Mooresville, IN

9:40 am Theodore Kurze, M.D., Pasadena, CA

9:50 am E.S. Siker, M.D., Pittsburgh, PA

10:00 am **Intermission to Visit Exhibits**

10:30 am Elvoy Raines, J.D., Durham, NC

10:40 am Benjamin F. Rush, Jr., M.D., Newark, NJ

10:50 am Richard Roberts, M.D., Madison, WI

11:00 am Norman M. Cole, M.D., Louisville, KY

11:10 am Questions & Answers

11:40 am Wrap-Up

12:00 noon **President's Installation & Awards Luncheon**

***Ky Chapter, American College of Emergency Physicians***

Meeting Room J—BCC

Wednesday, September 16, 1987

2:15 pm **"Advances in Pre-Hospital Care"**

Paul Paris, M.D., Pittsburgh, PA

3:00 pm **Intermission to Visit Exhibits**

3:30 pm **"Advances in Pre-Hospital Care"**

Paul Paris, M.D., Pittsburgh, PA

***Ky Chapter, American Academy of Family Physicians***

Meeting Rooms B & C—BCC

Wednesday, September 16, 1987

2:15 pm **"Medical Malpractice: Why Risk Management Should Suit You"**

Richard G. Roberts, M.D., J.D., Madison, WI

3:15 pm **Intermission to Visit Exhibits**

3:45 pm **"Medical Malpractice: Why Risk Management Should Suit You"**

Richard G. Roberts, M.D., J.D., Madison, WI



**Merrill A. Ritter,  
M.D.**

Mooresville, IN

Orthopaedic Surgeon, Center for Hip & Knee Surgery, Mooresville; Professor, Orthopaedic Surgery, Indiana University. M.D., 1963, Indiana University School of Medicine. Member, American College of Surgeons; AMA; Indiana State Medical Association; Orthopaedic Research Society; and American College of Sports Medicine.



**Theodore Kurze,  
M.D.**

Pasadena, CA

Clinical Professor, Neurological Surgery, University of Southern California; Instructor, Department of Religion and Philosophy, College of Letters Arts and Science, University of Southern California, Los Angeles; Chairman, Neurological Surgery, Huntington Memorial Hospital, Pasadena. M.D., 1947, Long Island College of Medicine, Downstate New York, Brooklyn. Member, Los Angeles Academy of Medicine; California Medical Association; Western Neurosurgical Society; American College of Surgeons; American Association of Neurological Surgeons; Congress of Neurological Surgeons; and past President, Los Angeles Society of Neurology and Psychiatry, Inc. Awarded Outstanding Achievement—Special Class, Academy of Television Arts and Sciences—*Lifeline*, NBC 1979; Certificate of Recognition, National Aeronautics and Space Administration, 1982.



### ***Ky Neurosurgical Society***

Meeting Room A—BCC

Wednesday, September 16, 1987

- 2:30 pm **"Strategic Anatomy of the Posterior Fossa"**  
Theodore Kurze, M.D., Pasadena, CA
- 3:15 pm **"RAS Oncogene in Human Glioblastoma Multiple Formi"**  
John Walsh, M.D., Lexington, KY
- 3:30 pm **"Surgery for Single Brain Metastases: A Random Study"**  
Roy Patchell, M.D., Lexington, KY
- 3:45 pm **Intermission to Visit Exhibits**
- 4:15 pm **"The Relationship Between Carotid Stenosis and Cerebral Ischemia"**  
Robert Dempsey, M.D., Lexington, KY
- 4:30 pm **"Degenerative Spondylolisthesis"**  
Phillip Tibbs, M.D., Lexington, KY
- 4:45 pm **"Results of Lumbar Disc Surgery Versus Chymopapain Injection in Private Practice Setting"**  
Lawrence Jelsma, M.D., Louisville, KY
- 5:00 pm **"Dependent Syringo Subarachnoid Shunting"**  
James B. Macon, III, M.D., Louisville, KY
- 5:30 pm Reception—Kentucky A—Ramada

### ***Ky Occupational Medical Association***

Meeting Room H—BCC

Wednesday, September 16, 1987

- 2:15 pm **"Part I—Occupational Asthma: An Overview"**  
Frank P. Vannier, M.D., Louisville, KY
- 2:40 pm **"Part II—Occupational Asthma: Case Presentations"**  
Lyle H. Boyea, M.D., Louisville, KY
- 3:00 pm **Intermission to Visit Exhibits**
- 3:30 pm **"Carpal Tunnel Syndrome: Conservative & Surgical Management"**  
Morton L. Kasdan, M.D., Louisville, KY
- 4:15 pm **Pneumoconiosis Including Pulmonary Function Testing**  
Arthur L. Frank, M.D., Ph.D., Lexington, KY



**E. S. Siker, M.D.**  
Pittsburgh, PA

Chairman, Department of Anesthesiology, Mercy Hospital of Pittsburgh; Clinical Professor, University of Pittsburgh School of Medicine. M.D., New York College of Medicine. Past President, American Society of Anesthesiologists and American Board of Anesthesiology. Secretary of the Anesthesia Patient Safety Foundation, and President-Elect, Association of Anesthesia Program Directors. Honorary Fellowship, Faculty of Anesthetists of the Royal College of Surgeons of England.



**Elvoy Raines, J.D.**  
Durham, NC

President, Square One Consulting Group, Inc., Durham. J.D., 1978, University of Florida. Dissertation level candidate for Doctor of Science degree in Health Law Policy, Harvard University. Author of numerous publications.

**Ky Society for Plastic &  
Reconstructive Surgery**

General Sessions Area—BCC

Wednesday, September 16, 1987

- 2:15 pm **"Welcome"**  
Edgar A. Lopez, M.D., Louisville, KY
- 2:20 pm **"Reconstruction of Chest Wall Defects"**  
George Pope, M.D., U of L Resident
- 2:30 pm **"Maxillofacial Surgery"**  
Dale Roberts, M.D., Louisville, KY
- 2:40 pm **"Reconstruction of Infected Sternal Wounds"**  
David Creech, M.D., U of L Resident
- 2:50 pm **"Herpetetic Eruptions Following Chemical Peel-Diagnosis and Prophylaxis"**  
Gerald Verdi, M.D., Louisville, KY
- 3:00 pm **"There is No Augment for All Seasons"**  
Martin Luftman, M.D., Lexington, KY
- 3:10 pm Discussion
- 3:20 pm **Intermission to Visit Exhibits**
- 3:40 pm **"Hydrofluoric Acid Burns"**  
Thomas D. McKim, M.D., U of K Resident
- 3:50 pm **"Vaginal & Pelvic Reconstruction with Distally Based Rectus Abdominis Myocutaneous Flaps"**  
Gordon Tobin II, M.D., Louisville, KY
- 4:00 pm **"Topic To Be Announced"**  
Joseph Fata, M.D., U of K Resident
- 4:10 pm **"Newer Perceptions and Techniques in Aesthetic Plastic Surgery"**  
Luis O. Vasconez, M.D., Birmingham, AL
- 4:30 pm Discussion
- 4:45 pm Business Meeting



**Benjamin F.  
Rush, Jr., M.D.**  
Newark, NJ

Professor and Chairman, Department of Surgery; Surgeon-in-Chief; and Director of Surgery, University of Medicine and Dentistry of New Jersey, New Jersey Medical School, Newark. M.D., 1948, Yale University Medical School. Member, Editorial Board, *Excerpta Medica*, *American Journal of Clinical Research*, *The American Surgeon*; American College of Surgeons; Society of University Surgeons; American Surgical Association; American Federation for Clinical Research; AMA; Medical Society of New Jersey, past President, Kentucky Division, American Cancer Society; American Association for Cancer Education; and New York Head and Neck Society.



**Richard G.  
Roberts, M.D.,  
J.D.**  
Madison, WI

Assistant Professor, Department of Family Medicine and Practice, University of Wisconsin. M.D., 1980, George Washington University School of Medicine, Washington, D.C.; J.D., 1977, University of Wisconsin Law School. Faculty Advisor, Family Medicine Interest Group, and Medical Director, Belleville Clinic, Madison, Wisconsin. Member, Board of Directors, Wisconsin Academy of Family Physicians; AMA; American College of Legal Medicine; and Speaker, House of Delegates, State Medical Society of Wisconsin.

**President's Installation & Awards Luncheon**

Julia Belle Ballroom  
Ramada Inn East

**Richard F. Hench, M.D.**  
**KMA President, presiding**

Invocation  
Recognition

Guest Speaker  
**Donald Kmetz, M.D.**  
**Dean, U of L School of Medicine**

Awards Presentation  
S. Randolph Scheen, M.D., Louisville  
Chairman, KMA Awards Committee

Installation of new KMA President



**Donald C. Barton, M.D.**  
**KMA President-Elect, Presiding**  
 Thursday, September 17, 1987  
 Morning General Session  
 General Sessions Area—Bluegrass Convention Center

- 8:15 am Movie—"Beyond Fear: The Community"
- 8:50 am Opening Ceremonies
- 9:00 am "Advances in the Treatment of Asthma"  
 I. Leonard Bernstein, M.D., Cincinnati, OH
- 9:20 am "Pitfalls in the Evaluation and Treatment of Metastatic Cervical Lymphadenopathy of Undetermined Etiology"  
 Michael D. Maves, M.D., Iowa City, IA
- 9:40 am "Transport vs. Stabilization"  
 Paul Paris, M.D., Pittsburgh, PA
- 10:00 am Intermission to Visit Exhibits
- 10:30 am "Hypertensive Update"  
 Donald G. Vidt, M.D., Cleveland, OH
- 10:50 am "Cutaneous Blood Vessel Reactions-1987"  
 Joseph L. Jorizzo, M.D., Winston-Salem, NC
- 11:10 am "Modern Surgical Practice—New Solutions to Old Problems"  
 Philip E. Donahue, M.D., Chicago, IL
- 11:30 am "Office Screening for Glaucoma by Non-ophthalmologists"  
 Michael Kass, M.D., St. Louis, MO
- 11:50 am "Update on AIDS"  
 Peter Walzer, M.D., Cincinnati, OH

**Ky Society of Allergy & Clinical Immunology**

Meeting Room I—BCC  
 Thursday, September 17, 1987

- 1:30 pm "Current Research In Allergy"  
 I. Leonard Bernstein, M.D., Cincinnati, OH
- 2:00 pm "Cockroach Allergy"  
 Bann Kang, M.D., Lexington, KY
- 2:30 pm Intermission to Visit Exhibits
- 3:00 pm "Current U of L Allergy Research"  
 E.B. Gevedon, M.D., Louisville, KY
- 3:30 pm Business Meeting
- 4:00 pm Social Hour—Meeting Room H



**Norman M. Cole, M.D.**  
 Louisville, KY

Private Practice, Aesthetic Plastic Surgery, Louisville. M.D., 1962, Loma Linda University, California. Associate Clinical Professor of Plastic Surgery, University of Louisville; Assistant Clinical Professor of Plastic Surgery, University of Kentucky. President of American Society for Aesthetic Plastic Surgery. Chairman, Finance Committee, American Society of Plastic and Reconstructive Surgeons, Inc. Member, American Association of Plastic Surgeons; Kentucky Surgical Society; KMA; and AMA.



**Michael D. Maves, M.D.**  
 Iowa City, IA

Associate Professor, Otolaryngology—Head & Neck Surgery, and Director, Division of Head and Neck Oncology, University of Iowa Hospitals and Clinics. M.D., 1973, Ohio State University College of Medicine. Member, Research Committee, American Academy of Facial Plastic and Reconstructive Surgery; American Academy of Otolaryngology; American College of Surgeons-Field Liaison of the Commission on Cancer; AMA; Association for Research in Otolaryngology; American Society for Head and Neck Surgery. Author of numerous books and articles.

### ***Ky Society of Anesthesiologists***

Julia Belle Ballroom—BCC

Thursday, September 17, 1987

1:30 pm **"Guidelines for Intra-Operative Monitoring"**

Ephraim S. Siker, M.D., Pittsburgh, PA

2:15 pm **"The Future of Anesthesia Practice in the U.S."**

Robert Vaughan, M.D., Chapel Hill, NC

3:00 pm **Intermission to Visit Exhibits**

3:30 pm **"The Current Status of Opioids Used for Anesthesia"**

Paul N. Samuelson, M.D., Birmingham, AL

4:15 pm **"Intra-Operative Gas Monitoring"**

Markku Paloheimo, M.D., Louisville, KY

5:00 pm **Business Meeting**

### ***Ky Dermatological Society***

University of Louisville Dermatology Office

310 East Broadway

Thursday, September 17, 1987

1:30 pm **Presentation of Clinical Cases**

3:00 pm **Proceed to Methodist Hospital Auditorium for Case Discussions**

### ***Ky Society of Otolaryngology***

#### ***Head & Neck Surgery, Inc.***

Meeting Rooms B & C—BCC

Thursday, September 17, 1987

1:30 pm **"Surgical Treatment of the Sleep Apnea Syndrome"**

Michael D. Maves, M.D., Iowa City, IA

2:00 pm **"Multi-Disciplinary Approach to the Dizzy Patient"**

Panel Discussion

2:45 pm **Intermission to Visit Exhibits**

3:15 pm **"A State of the Art Laryngeal Laboratory"**

Michael D. Maves, M.D., Iowa City, IA

3:45 pm **Business Meeting**

### ***Ky Academy of Eye Physicians & Surgeons***

Meeting Room F—BCC

Thursday, September 17, 1987

1:30 pm **"Presentation of Free Papers By the Ky Academy of Eye Physicians & Surgeons"**  
Ophthalmologists

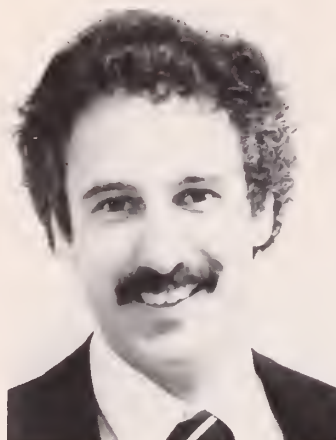
2:30 pm **Intermission to Visit Exhibits**

3:00 pm **"Glaucoma"**

Michael Kass, M.D., St. Louis, MO

4:00 pm **Business Meeting**

5:00 pm **Cocktail Hour—Kentucky B—Ramada**



**Paul M. Paris,  
M.D.**

Pittsburgh, PA

Associate Professor of Medicine and Associate Chief, Division of Emergency Medicine, University of Pittsburgh School of Medicine. M.D., 1976, University of Pittsburgh. Member, The World Association for Emergency and Disaster Medicine; American College of Emergency Physicians; Society for Teachers in Emergency Medicine; American College of Emergency Physicians. Author of numerous publications.



**Donald G. Vidt,  
M.D.**

Cleveland, OH

Chairman, Department of Hypertension and Nephrology, Cleveland Clinic Foundation. M.D., 1959, Ohio State University, Columbus. Past President, American Society for Clinical Pharmacology and Therapeutics, and Ohio Society of Internal Medicine. Editorial Board, *Clinical Journal of Hypertension*; *Illustrated Medicine*; *Med Stream*. Member, American College of Physicians; American Federation for Clinical Research; Heart Association of Northeastern Ohio; AMA; American Society of Internal Medicine; and International Union of Angiology.



## ***Ky Society for Gastrointestinal Endoscopy***

Meeting Room A—BCC

Thursday, September 17, 1987

- 1:30 pm **"Endoscopic Treatment of Gastrointestinal Hemorrhage"**  
Philip E. Donahue, M.D., Chicago, IL
- 2:30 pm **Intermission to Visit Exhibits**
- 3:00 pm **"The Garren Bubble—Local Experience and Recommendations"**  
Timothy Brown, M.D. & Gerald R. Larson, M.D., Louisville, KY
- 3:20 pm **"Endoscopic Aspects of Bone Marrow Transplantation and Radiation Bowel Disease"**  
Norman Gilinsky, M.D., Lexington, KY
- 3:40 pm **"Controlled Studies in Peptic Ulcer Disease—Trials and Tribulations"**  
Kenneth R. Kranz, M.D. & Richard N. Redinger, M.D., Louisville, KY
- 4:00 pm **"Percutaneous Cholelithotomy"**  
T. Jeffery Wieman, M.D., Louisville, KY
- 4:15 pm **"The Role of Colonoscopy in Pseudo Obstruction of the Colon"**  
John Gosche, M.D., Louisville
- 4:30 pm **KSGE Annual Meeting and Election (Members Only)**
- 5:00 pm **Reception—Kentucky A—Ramada**

## ***Ky Region, American College of Physicians***

Meeting Rooms D & E—BCC

Thursday, September 17, 1987

- 2:00 pm **"Newer Antihypertensive Drugs"**  
Donald G. Vidt, M.D., Cleveland, OH
- 2:30 pm **"Hypertension and Diabetes"**  
Gordon P. Guthrie, Jr., M.D., Lexington, KY
- 3:00 pm **Intermission to Visit Exhibits**
- 3:30 pm **"Treatment of Acute Myocardial Infarction"**  
Joel Kupersmith, M.D., Louisville, KY
- 4:00 pm **"The Black Lung Problem in Kentucky"**  
William Anderson, M.D., Louisville, KY
- 4:30 pm **"Office Evaluation and Treatment of Lipid Disorders"**  
James Anderson, M.D., Lexington, KY

## ***Ky Association of Public Health Physicians***

Meeting Room J—BCC

Thursday, September 17, 1987

- 1:30 pm **"Public & Private Sectors' Responsibility in AIDS"**  
Peter Walzer, M.D., Cincinnati, OH  
Discussion & Questions & Answers
- 2:30 pm **Business Meeting**



**Joseph L. Jorizzo, M.D.**  
Winston-Salem, NC

Professor and Chairman, Department of Dermatology, Bowman Gray School of Medicine of Wake Forest University. M.D., 1975, Boston University. Director, Dermatology Residency Program, Bowman Gray School of Medicine. Reviewer, *Archives of Dermatology* and *Journal of American Academy of Dermatology*. Member, Society of Investigative Dermatology, President of Southern Section; American College of Cryosurgery; Southern Medical Association; AMA; and American Federation of Clinical Research.



**Philip E. Donahue, M.D.**  
Chicago, IL

Chairman of General Surgery, Cook County Hospital, Chicago; Associate Professor of Surgery, University of Illinois at Chicago. M.D., 1968, Thomas Jefferson University, College of Medicine, Philadelphia. Member, American College of Surgeons; American Gastroenterologic Association; American Society of Gastrointestinal Endoscopy; Society of American Gastrointestinal Endoscopic Surgeons; Editorial Board, *Digestive Surgery*. Author of numerous publications.



**David Ling, M.D.**  
Raleigh, NC

Radiologist, Wake Radiology, Raleigh; Medical Staff, Wake Medical Center, Raleigh. M.D., 1977, Duke University School of Medicine, Durham, North Carolina. Member, Radiological Society of North America. Author of numerous publications.



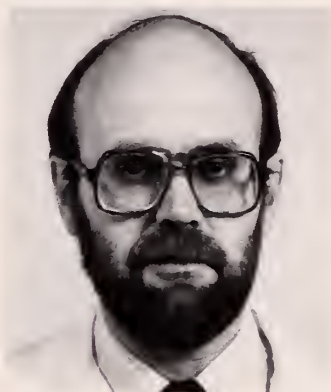
**Michael A. Kass, M.D.**  
St. Louis, MO

Professor of Ophthalmology, Washington University School of Medicine, St. Louis. M.D., 1966, Northwestern University Medical School. Associate Editor, *American Journal of Ophthalmology*. Member, AMA; Missouri Medical Society; Missouri Ophthalmologic Society; American Glaucoma Society; and Association for Research in Vision and Ophthalmology.



**I. Leonard Bernstein, M.D.**  
Cincinnati, OH

Clinical Professor of Medicine and Environmental Health Sciences; Director of Allergy Research Laboratory and Allergy Training Program, Division of Immunology, Department of Medicine, University of Cincinnati Medical Center. M.D., 1949, University of Cincinnati Medical School. Member, American Academy of Allergy and Immunology, President 1982; American Thoracic Society; American College of Physicians; Society for Occupational and Environmental Health. Fellow, American Academy of Allergy, American College of Physicians. Author of numerous publications.



**Peter D. Walzer, M.D.**  
Cincinnati, OH

Chief, Infectious Diseases, VA Medical Center, Cincinnati; Professor of Medicine, Pathology and Laboratory Medicine, University of Cincinnati College of Medicine. M.D., 1968, Albany Medical College, Albany, New York. Member, American College of Physicians; Infectious Disease Society of America; American Federation for Clinical Research; Central Society for Clinical Research; American Society for Microbiology; and American Association for the Advancement of Science. Author of numerous publications.

*This program has been reviewed and is acceptable for 18 prescribed hours for the American Academy of Family Physicians.*



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## *Annual Meeting Special Events*



**“University of Louisville School of Medicine, A 150 Year Tradition of Medical Excellence”** will be the topic when U of L Medical School Dean Donald R. Kmetz, M.D., speaks at the President’s Installation & Awards Luncheon to be held on Wednesday, September 16, in the Julia Belle Room, Ramada Inn East Convention Center. Special recognition will be made to those U of L graduates who have gone on to become Presidents of KMA. The luncheon will include the presentation of KMA awards and the installation of the 1987–88 President, Donald C. Barton, M.D., Corbin.

**“150 Years of Fashion” Commemorating the Sesquicentennial of the University of Louisville School of Medicine** will be featured during a luncheon and style show presented by the Auxiliary to the Kentucky Medical Association at 12:15 P.M. on Tuesday, September 15, in Kentucky A & B, Ramada Inn East Convention Center. Exquisite fashions from Joseph’s Silks of Many Colours and Original Couturier Designs by Camille Morgan of Atlanta will be worn by guest models and auxiliaries from throughout the state.

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## *General Sessions Summaries*

### **Dealing with the Bad Result**

**J. Kelley Avery, M.D.**

Essentially the points would be that no matter how competent a physician you are and no matter the standard of care, bad results do happen—they are inevitable. Therefore, a physician needs to develop a good rapport with an informed patient before the fact and, after the fact, deal with this patient in a straightforward, compassionate manner, documenting the process.

Following Doctor Avery's presentation, comments will be made by a seven-member reactor panel regarding risk management and how it affects their particular specialties. Members of this panel and the specialty societies they represent will be Norman M. Cole, M.D., Ky Society for Plastic and Reconstructive Surgery; Merrill A. Ritter, M.D., Ky Orthopedic Society; Theodore Kurze, M.D., Ky Neurosurgical Society; E. S. Siker, M.D., Ky Society of Anesthesiologists; Benjamin F. Rush, Jr., M.D., Ky Chapter, American College of Surgeons; Richard Guy Roberts, M.D., J.D., Ky Chapter, American Academy of Family Physicians; and Elvoy Raines, J.D., Ky OB-GYN Society - Ky Section ACOG.

### **Modern Surgical Practice - New Solutions to Old Problems**

**Philip E. Donahue, M.D.**

This talk will address several of the developments in the practice of modern gastrointestinal surgery and predict the directions of future treatment patterns. The developments in general surgery include the refinement of many of our surgical techniques, including the discarding of gastric resection for benign disease, more specific criteria for surgical intervention, the discovery of treatments with less inherent morbidity, *etc.* Included will be a brief discussion of the "blurring" of the boundaries of the medical disciplines, largely as a result of endoscopy. Also it will be shown that all of these trends are part of an evolution in modern medical practice, and that further such changes are just around the corner.

### **Update on AIDS**

**Peter D. Walzer, M.D.**

The talk will be an overview of the current status of AIDS. Topics will include epidemiology, clinical manifestations, diagnosis and treatment.

### **Magnetic Resonance Imaging of the Abdomen** **David Ling, M.D.**

At the present time, magnetic resonance (MR) has had the greatest impact upon imaging the central nervous system. The application of MR to the rest of the body has been extensively investigated. In the abdomen the role of MR is primarily that of a problem-solving modality. The current indications for performing MR studies of the liver, adrenal glands and kidneys will be presented. The relative advantages and disadvantages of MR with respect to computed tomography and ultrasound will also be discussed.

### **Immediate Breast Reconstruction Following Mastectomy**

**Luis O. Vasconez, M.D.**

When a patient with carcinoma of the breast elects mastectomy as the formal therapy the option of breast reconstruction is offered to selective patients. The breast reconstruction is performed by one of three methods: 1. Insertion of silicone implants; 2. Insertion of a skin expander; 3. Immediate reconstruction with a transverse island abdominal flap. Sixty patients who have undergone this procedure in these past two years have been evaluated. Most patients were stage I carcinoma and 25% showed positive axillary nodes. Chemotherapy was initiated as indicated without any delay because of the reconstruction. Local recurrences have been noted on four patients in this relatively short period of time but all of them occurred in an easily palpable site around the scar and at the subcutaneous level. In no patient could one say that the recurrence was hidden by the reconstruction. The average length of hospitalization was prolonged two days (4-6) in patients who underwent reconstruction as opposed to a group of mastectomy patients. The total cost of hospitalization was also increased but when compared to the second stage of reconstruction there was a marked reduction of at least 50% in total cost. Psychological benefits, as well as patient satisfaction, have been studied by a neutral observer and the data will be presented.



### **"The Lonely Stand"**

#### **The Stress of Malpractice Now a Major Stress of Practice N. Donald Feibelman, III, M.D.**

The stress of malpractice affects first the physician, but extends well beyond the doctor. Families are very much susceptible to this stress as are staff and even patients. Malpractice lawsuits are changing the practice of medicine, but are physicians truly cognizant of this new player on their field? Do physicians know how to cope with this challenge or have we been reluctant to meet it head on? Where will our support come from in these times of major stress and are we really educated to accommodate to this pressure? We studied the physicians in Kentucky and their responses will be presented.

#### **The Evaluation of the Patient with Recurrent Urolithiasis**

##### **Stephen N. Rous, M.D.**

This presentation is a step-by-step protocol for evaluating the patient who is a recurrent stone former that will enable the clinician to determine precisely what the etiology is for the stone-forming problem. The intended audience for this would be any group of physicians who treat patients with urolithiasis.

#### **Diagnostic Fine Needle Biopsy**

##### **Michael D. Glant, M.D.**

This presentation will review the important variables that determine the success of this technique. A high yield approach which has been successful in outpatient and inpatient situations will be demonstrated. A definitive result in benign as well as malignant conditions is obtained in 85-90% of cases, which allows uncompromised treatment and follow-up. Such success requires a close working relationship between pathologist and clinician, considerable experience in collection and processing of samples, and expertise in analysis. The diagnostic utility of this approach in primary and specialty practices will be reviewed.

#### **Reporting Results of Examinations to Management - Ethical and Practical Considerations**

##### **Sidney Lerner, M.D.**

A form will be presented which has been developed to help the physician accomplish these goals.

#### **Immunization Update**

##### **Walter T. Hughes, M.D.**

This presentation will include comments on the current status of certain vaccines in the developmental stage such as the varicella and AIDS vaccines. Also some attention will be given to the current controversies of the pertussis, polio, *H. influenzae* and pneumococcal vaccines.

#### **The Workup and Evaluation of a Cervical Neck Mass of Undetermined Etiology**

##### **Michael D. Maves, M.D.**

This presentation will attempt to highlight the various entities which may present as a solitary mass within the neck. More importantly, it will provide the physician with a diagnostic decision tree to follow to prevent errors in the workup and management of these relatively common problems.

#### **Office Screening for Glaucoma by Nonophthalmologists**

##### **Michael A. Kass, M.D.**

- I. Reasons to do glaucoma screening
  - A. Glaucoma is one of the leading causes of blindness in the U.S.
  - B. High prevalence of glaucoma in our aging population
- II. Techniques for screening
  - A. Tonometry
  - B. Ophthalmoscopy
  - C. Visual field
- III. Groups of special interest
  - A. Relatives of glaucoma patients
  - B. Diabetics
  - C. Myopic individuals
  - D. Blacks

#### **Cutaneous Blood Vessel Reactions - 1987**

##### **Joseph L. Jorizzo, M.D.**

The patient with a generalized red rash is a common and often frustrating problem for the physician. Erythema, urticaria, erythema multiforme and vasculitis will be reviewed as a spectrum. Serum sickness-like features and hope on the horizon for improved diagnosis will be emphasized.

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### **Treatment Strategies of Dyspnea**

**Donald A. Mahler, M.D.**

Dyspnea, or breathlessness, is the most common complaint of patients with various cardiorespiratory disorders. Because treatment of various chronic cardiorespiratory disorders does not appear to alter the natural history of the disease or reduce mortality, treatment should be directed at improving symptoms. Treatment strategies for improving dyspnea include breathing techniques, exercise training, nutritional manipulations, psychologic interventions, respiratory muscle training, respiratory muscle rest, and sedative/narcotic medications.

### **Hypertension Update**

**Donald G. Vidt, M.D.**

Current epidemiologic information on hypertension prevalence and risks will be reviewed and will include important data from recent clinical trials. The controversy and potential benefits of aggressively treating mild hypertension will be addressed including the role of newer classes of antihypertensive agents. A better understanding of the risks vs benefits of treatment should facilitate treatment decisions in the patient with mild, asymptomatic hypertension.

### **Transport vs Stabilization**

**Paul M. Paris, M.D.**

My goal of this lecture will be to discuss the current literature and philosophy regarding major trends in the pre-hospital care of medical emergencies and trauma. Successes, failures, and future challenges to physicians involved in EMS will be discussed.



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# 1987 Technical Exhibitors

A. H. Robins Company (49)  
A. P. Lee Agency, Inc. (59)  
Abbott Laboratories (39)  
Adria Laboratories (4)  
American Physical Therapy Group (53)  
American Physicians Life (73)  
Ames Division (12)  
Ayerst Laboratories (35)

Becton Dickinson and Company (82)  
Beecham Laboratories (5)  
Berlex Laboratories, Inc. (57)  
Blue Cross and Blue Shield of Kentucky (11)  
Bristol Laboratories (31)  
Burroughs Wellcome Company (66)

Carnrick Laboratories, Inc. (81)  
Central Pharmaceuticals, Inc. (92)  
Charter Hospitals of Kentucky (15)  
Ciba Pharmaceutical Company (55)  
Clayton L. Scroggins Associates, Inc. (14)  
Convatec-Squibb (69)

Disability Determinations (20)  
Dista Products Company (80)  
Dodson Insurance Company (97)  
Dorsey Pharmaceuticals (65)

E. R. Squibb & Sons, Inc. (41)  
Eli Lilly & Company (18)

First Kentucky Trust (100)  
Fisons Corporation (63)  
Frazier Rehabilitation Center (83)

Geigy Pharmaceuticals (86)  
Gerber Products Company (13)  
Glaxo Inc. (74)  
Good Samaritan Hospital (21)  
Guild of Prescription Opticians of Kentucky (53)

Health Data Network (47)  
Hearing Aid Association of Kentucky (33)  
Holly Cosmetics (89)  
Humana, Inc. (51)

Inmed Diagnostics (64)  
Integrated Resources Equity Corporation (96)  
International Medical Electronics, Ltd. (71)

J. H. Systems, Inc. (Jewish Hospital) (8)  
Janssen Pharmaceutica (101)  
Joe Dawson & Associates/Scale-Tronix (90)  
John Hancock Healthplan of Kentucky (98)

KMA Insurance, Inc. (22)  
KMI Medical Center (24) (25)  
Kentucky Air National Guard (30)  
Kentucky Army National Guard (94) (95)  
Kentucky Medical Insurance Company (23)  
Key Pharmaceuticals (72)  
Knoll Pharmaceuticals (67)

Lederle Laboratories (38)  
Louisville Andrology (103)

Marion Laboratories, Inc. (26)  
McKay Reed Company (40)  
McNeil Consumer Products Co. (45)  
Mead Johnson Nutritional Division (36)  
Mead Johnson Pharmaceutical Division (56)

Medical Management Resources (58)  
Mediscus Products, Inc. (60)  
Merck Sharp & Dohme (42)  
Methodist Evangelical Hospital (28)  
Miles Pharmaceuticals (87)  
Mony Financial Services (78)

Norton Psychiatric Clinic (88)  
Norwich Eaton Pharmaceuticals, Inc. (10)

Olympus Corporation (7)  
Ortho Pharmaceutical Corporation (1)  
Our Lady of Peace Hospital (68)

Parke-Davis (76)  
Pennwalt Corporation, Prescription Division (93)  
Pfizer Laboratories (91)  
Princeton Pharmaceutical Products (77)  
Professional Office Systems, Inc. (32)

Ransdell Surgical, Inc. (48)  
Riker Laboratories, Inc./3M (34)  
Roche-Biomedical Laboratories, Inc. (27)

Rorer Pharmaceuticals (84)  
Ross Laboratories (50)

Sandoz Pharmaceuticals (37)  
Schering Corporation (2)  
Searle Pharmaceuticals, Inc. (70)  
Skycare, Inc. (99)  
Smith Kline & French Laboratories (61)  
Southern Medical Association (6)  
Stuart Pharmaceuticals (17)

The I-M Group, Inc. (9)  
The Lang Company (44)  
The Medical Protective Company (43)  
The Upjohn Company (16)

UAD Laboratories, Inc. (52)  
U.S. Airforce (102)  
U.S. Army Health Professional Support Agency (79)  
Upjohn Healthcare Services (46)

W. B. Saunders (75)  
Wallace Laboratories (54)  
Westwood Pharmaceuticals (3)  
Whitehall Laboratories (29)  
Winthrop Pharmaceuticals (19)  
Wyeth Laboratories (85)

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## Technical Exhibits

**A. H. Robins Company** Booth #49  
1407 Cummings Drive  
Richmond, VA 23220  
(804)257-2563

You are cordially invited to visit the A. H. Robins exhibit and meet our representatives who will welcome the opportunity to discuss our products; Reglan and Micro-K.

**A. P. Lee Agency, Inc.** Booth #59  
10301 Linn Station Road, #101  
Louisville, KY 40223  
(502)426-6041

**Abbott Laboratories** Booth #39  
14th and Sheridan Road  
North Chicago, IL 60064  
(312)937-3280

You are cordially invited to visit the Abbott exhibit which will feature TRANXENE® (clorazepate dipotassium), PCE™ (erythromycin particles in tablets), OGEN® (estropipate tablets, USP) and other pharmaceutical products.

**Adria Laboratories** Booth #4  
9237 Stonegate Road  
Indianapolis, IN 46227  
(317)882-8747

**American Physical Therapy Group** Booth #53  
1628 Nicholasville Road  
Lexington, Kentucky 40503  
(606)278-2121

**American Physicians Life** Booth #73  
P. O. Box 281, Bates Drive  
Pickerington, OH 43147  
1-800-742-1275

American Physicians Life (APL) specializes in life insurance and financial planning services for physicians' personal and business needs. APL has established operations throughout the mid-west in cooperation with other medical associations and physician-owned entities.

**Ames Division** Booth #12  
P. O. Box 70  
Elkhart, IN 46515  
(219)262-7846

**Ayerst Laboratories** Booth #35  
685 Third Avenue  
New York, NY 10017  
(212)878-6001

Our representatives look forward to a visit with you, and for the opportunity to discuss the Ayerst products and services of interest to you.

**Becton Dickinson and Company**  
**Clay Adams Division** Booth #82  
One Becton Drive  
Franklin Lakes, NJ 07417-1882  
(201)848-6733

Stop by the Clay Adams Booth and see the new IQ™ IMMUNOCHEMISTRY SYSTEM; a simple approach to thyroid profiling and therapeutic drug monitoring for the physicians office. The IQ delivers results easily, accurately and economically and also performs routine chemistries on one compact unit.

Look for the award winning QBC®II CENTRIFUGAL HEMATOLOGY ANALYZER. Get seven hematology parameters as easy as a spun hematocrit. Now available with improved reagent tubes.

Featured will be Clay Adams diagnostic "Laboratory On A Stick" — QTEST® OVULATION, QTEST™ PREGNANCY and QTEST™ GROUP A STREP.

Also on display will be the economical QCA® Potassium/Chemistry Analyzer. QCA performs 14 important chemistry procedures plus Potassium with ease.

**Beecham Laboratories** Booth #5  
501 Fifth Street  
Bristol, TN 37620  
(615)764-5141

Beecham Laboratories has most recently introduced the first oral and injectable clavulanate antibiotics, Augmentin and Timentin. Due to their unique ability to destroy beta-lactamases, these clavulanate antibiotics offer expanded coverage and activity against an array of bacteria, which in the past have been resistant to cephalosporins and penicillins.

**Berlex Laboratories** Booth #57  
300 Fairfield Road  
Wayne, NJ 07470  
(201)694-4100

**Blue Cross and Blue Shield and Delta Dental of Kentucky** Booth #11  
9901 Linn Station Road  
Louisville, KY 40223

The 1987 Blue Cross and Blue Shield exhibit will offer physicians the opportunity to meet with representatives of the Provider and Professional Affairs Division. Our representatives will be present at the booth to answer any question you may have.



**Bristol Laboratories** Booth #31  
2404 West Pennsylvania Street  
Evansville, IN 47721  
(812)429-7332

You are invited to visit the Bristol Laboratories exhibit where our medical representatives will be pleased to discuss products of interest to you. Products to be featured are: Questran® (cholesterol resin), Naldecon® (antihistamine decongestant), Naldecon® X-Line™ K-Lyte® (potassium supplement) and Duricef® (cefadroxil).

**Burroughs Wellcome Company** Booth #66  
3030 Cornwallis Road  
Research Triangle Park, NC 27709  
(919)248-3000  
Pharmaceuticals.

**Carnrick Laboratories, Inc.** Booth #81  
65 Horse Hill Road  
Cedar Knolls, NJ 07927  
(201)267-2670

**Central Pharmaceutical Inc.** Booth #92  
120 East Third Street  
Seymour, IN 47274  
(812)522-3915

**Charter Hospitals of Kentucky**  
**Lexington, Louisville, Paducah** Booth #15  
1405 Browns Lane  
Louisville, KY 40207

Specialized programs treating psychiatric and addictive diseases. Multi-disciplinary team approach — staff consisting of experienced clinical professionals. JCAH Accredited.

**CIBA Pharmaceutical Company** Booth #55  
Morris Avenue  
Summit, NJ 07901-9943

**Clayton L. Scroggins Associates, Inc.** Booth #14

200 Northland Boulevard  
Cincinnati, OH 45246  
(513)771-7070

Professional practice management and financial planning for doctors exclusively. An organization of qualified, experienced professionals providing impartial counsel in a professional, comprehensive and confidential manner. Individualized determination of each client's needs on a fee-for-service basis, offering total objectivity on which our reputation depends. Services throughout Kentucky, Ohio and Indiana.

**Convatec-Squibb** Booth #69  
10719 Colonial Woods Way  
Louisville, KY 40223

**Disability Determinations** Booth #20  
P. O. Box 1000  
Frankfort, KY 40602  
(502)564-7829

Our agency prepares Social Security and Supplemental Security Income disability determinations on Kentucky applicants. The Professional Relations staff will be available to answer questions, explain any new disability criteria and talk with physicians interested in performing consultative examinations on applicants across the state.

**Dista Products Company** Booth #80  
Lilly Corporate Center  
Indianapolis, IN 46285  
(317)276-2554

**Dodson Insurance Company** Booth #97  
92nd Street & State Line  
Kansas City, MO 64114  
(800)821-3760  
Information regarding Dividend Program for Workers' Compensation Insurance approved by Kentucky Medical Association.

**Dorsey Pharmaceuticals** Booth #65  
59 Route 10  
East Hanover, NJ 07936  
(201)386-8167

Dorsey Pharmaceuticals invites you to stop by our exhibit where our representatives will be pleased to provide information on our products and educational materials that we have available.

**E. R. Squibb & Sons, Inc.** Booth #41  
P. O. Box 4000  
Princeton, NJ 08543-4000

E. R. SQUIBB & SONS, INC. has been a leader in the development of therapeutic and diagnostic products for the prevention, detection and treatment of diseases. You are cordially invited to meet our representatives who will be available at our exhibit to discuss our full line of health care products.

**Eli Lilly & Company** Booth #18  
Lilly Corporate Center  
Indianapolis, IN 46285  
(317)275-2554

Eli Lilly/Dista Products Company are proud to continue their long-standing association with the Kentucky Medical Association through their participation in the 1987 exhibit program. We welcome this opportunity to contribute to this fine organization and to discuss any inquiries you may have regarding our products including Ceclor® (cefaclor, Lilly), Humulin® (Human insulin of recombinant DNA origin, Lilly), Kflet™ (cephalexin, Dista), and Nalfon® (fenoprofen calcium, Dista).

**First Kentucky Trust****Booth #100**

First National Tower  
P.O. Box 36010  
Louisville, Kentucky 40232  
(502)581-7569

The exhibit will provide information on Investment and Trust services offered by First Kentucky Trust which include: Investment Management; Financial and Estate Planning; Tax Planning and Preparation; FKYN Brokerage, Inc.; Retirement Planning and Estate Probate Services.

**Fisons Corporation****Booth #63**

2 Preston Court  
Bedford, MA 01730  
(617)275-1000

INTAL, NASALCROM, AND OPTICROM will be featured at the Fisons' exhibit. These are unique products for the treatment of asthma and nasal and eye allergies. Every physician will want to know the benefits to his patients of this family of products.

**Frazier Rehabilitation Center****Booth #83**

220 Abraham Flexner Way  
Louisville, KY 40202-1887  
(502)582-7400

Frazier Rehab Center is a 75-bed rehabilitation hospital located in the Louisville Medical Center. For over 30 years, Frazier has been designing comprehensive rehabilitation programs for people disabled by stroke, amputation, head injury, burns, spinal cord injury, major multiple trauma, complicated fractures, polyarthritis, and other orthopedic and neurologic disorders. Our open admissions policy allows physicians to admit patients directly and follow their progress from admission to discharge or to delegate authority to a rehabilitation specialist on the staff.

**Geigy Pharmaceuticals****Booth #86**

Summit, New Jersey

**Gerber Products Company****Booth #13**

445 State Street  
Fremont, Michigan 49412  
(616)928-2257

Visit our booth featuring Gerber Baby Foods including new First Foods™ Fruits and Vegetables as well as breast pumps and nursing accessories, patient literature and product information.

**Glaxo Inc.****Booth #74**

47 Perimeter Center E.  
Suite 330  
Atlanta, Georgia 30346  
(404)668-0455

You are cordially invited to visit the Glaxo exhibit booth, where a Glaxo representative will be available to answer your questions and discuss the latest clinical information on Zantac, Fortaz, Trandate, Ventolin and Zinacef.

**Good Samaritan Hospital****Booth #21**

310 South Limestone Street  
Lexington, KY 40508  
(606)252-6612  
Hospital Services.

**Guild of Prescription Opticians of Kentucky****Booth #53**

640 4th Avenue  
Louisville, Kentucky 40202  
(502)583-0687

Eyeglasses adjusted — visit our booth to have your eyeglasses properly adjusted for maximum comfort and visual benefit. Minor repairs also can be made on the spot. Free Distance and Near Vision test cards, for use by the general practitioner, are offered. Your Guild Optician works closely with the ophthalmologist to provide the best in visual aid appliances. Support the Eye Physician Guild Optician type of eye services for better eye care.

**Health Data Network****Booth #47**

P. O. Box 6749  
Louisville, Kentucky 40206-0749  
(502)896-3000

Health Data Network will demonstrate an on-line computer system for the management of patient billing and accounts receivable, accounts payable, general ledger, and payroll in the physician's office. Graphic illustration on electronic claims processing, a service available to physicians for faster claims settlement and reduced paperwork, will also be provided. Samples of patient billings, collection letters, third-party payor billings and reports to aid in practice management will be available.

**Hearing Aid Association of Kentucky****Booth #33**

c/o 140 West Pike Street  
Covington, Kentucky 41011  
(606)431-2266

Keeping physicians informed of services and products provided to hearing impaired patients. Disseminate written and oral data regarding members and their locations throughout the state from whom such services may be obtained. Discuss common interests regarding patient care.



**Holly Cosmetics****Booth #89**

4947 Brownsboro Road  
Louisville, KY 40222  
(502)425-0225

Medical Image Products - Hair Prosthesis, chemo, turbans, androgenic hairpieces, corrective make-up, and skin care products. Human hair and synthetic wigs and the "MY HAIR" medical hair prosthesis from Australia. "Holly" has 27 years experience in the cosmetic industry and has spent the last four years developing the Medical Image Division of her Company. Having alopecia areata universalis, she can offer your patient support with their medical image problems.

**Humana, Inc.****Booth #51**

The Humana Building  
500 West Main Street  
Louisville, Kentucky 40201  
(502)580-3571

Humana is an integrated health care services company that owns and operates 86 hospitals, including seven in Kentucky — Louisville (4), Lexington, Louisville and Somerset. Physicians are needed in various specialties to join members of our medical staffs in these communities. Stop by our booth to discuss these opportunities.

**Inmed Diagnostics****Booth #64**

2950 Pacific Drive  
Norcross, GA 30071  
(404)449-6680

**Integrated Resources Equity Corporation****Booth #96**

444 South Fifth Street, Suite 200  
Louisville, Kentucky 40202  
(502)584-3110

Integrated Resources Equity Corporation is a full service investment firm which offers a wide variety of specialized investment programs. The parent company, Integrated Resources, Inc., is a nationally recognized financial services firm listed on the New York Stock Exchange. Integrated Resources, Inc. has a capital base in excess of \$600 million and more than \$1 billion in assets. Integrated manages over \$10 billion in assets on behalf of over 200,000 investors.

**International Medical Electronics, Ltd. Booth #71**

2805 Main Street  
Kansas City, MO 64108  
(816)221-0115

International Medical Electronics, Ltd., manufacturers of sophisticated medical equipment featuring Magnatherm short-wave diathermy with two detachable heads. Offering the ability to treat two separate areas or one from two directions at the same time. Please stop by Booth #71 for a demonstration.

**J. H. Systems, Inc. (Jewish Hospital) Booth #8**

250 East Liberty Street, Suite 100  
Louisville, Kentucky 40202  
(502)581-1162

As a result of Jewish Hospital's highly qualified physicians, much of Kentucky's healthcare history has been written at Jewish Hospital. Specialized services include: Louisville Institute for Heart and Lung Disease; The Louisville Institute for Hand and Microsurgery; Colonel Sanders Geriatric Center; Outpatient Care Center; Neuroscience Center; SKYCARE aeromedical services; Magnetic Resonance Imaging; Laser Surgery; Inpatient acute dialysis; Hyperbaric oxygen medicine; Electron microsurgery; Plastics and Aesthetic Center; Oncology Center; Inpatient diabetes program and more ...

**Janssen Pharmaceutica****Booth #101**

40 Kingsbridge Road  
Piscataway, NJ 08854  
(201)524-9199

**Joe Dawson & Associates/Scale-Tronix Booth #90**

2100 Gardiner Lane, Suite 216A  
Louisville, Kentucky 40205  
(502)451-6272

Patient scales: Bed, Wheelchair and Pediatrics.

**John Hancock HealthPlan of Kentucky Booth #98**

305 North Hurstbourne Lane, Suite 200  
Louisville, Kentucky 40222  
(502)425-4440

John Hancock HealthPlan of Kentucky, Inc. (JHKY) is a "direct contract" model HMO. JHKY contracts directly with primary care physicians to deliver defined primary health care services and case management to members who select them. JHKY is owned by John Hancock HealthPlans, Inc. involved in HMOs currently operating in Atlanta, Chicago, Hartford, Jacksonville and Philadelphia.

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**KMA Insurance Agency, Inc. Booth #22**

3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205  
(502)459-3400

KMA Insurance Agency, Inc., formed by the Kentucky Medical Association, offers a variety of insurance products specifically designed for physicians, such as: Office Protection, Home-owners, Automobile, Office Overhead, Life, Disability, Group Health and other types of insurance. Stop by and see what we can do for you. We welcome your visit.

**KMI Medical Center Booth #24 and #25**

8521 LaGrange Road  
Louisville, Kentucky 40222  
(502)426-6380

**Kentucky Air National Guard Booth #30**

Standiford Field  
Louisville, Kentucky 40213-2678  
(502)364-9424

The Kentucky Air National Guard is a Reserve Component of the Air Force. It offers physicians and other medical professionals the opportunity to serve their state and nation in a unique way. You also receive good pay, benefits, retirement, and valuable training that will enhance your career.

**Kentucky Army National Guard Booth #94 & #95**

Recruiting & Retention  
Boone National Guard Center  
Frankfort, KY 40601  
(502)564-8519

KENTUCKY ARMY NATIONAL GUARD — As a physician in the Army Guard, you can broaden your medical experience. You'll start as an officer, enjoying all the privileges and prestige rank can bring. And you can attend professionally approved courses at no cost. Best of all, you'll be helping people in your state and local community.

**Kentucky Medical Insurance Company Booth #23**

3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205  
(502)459-3400

Kentucky Medical Insurance Company, organized by the Kentucky Medical Association, is a professional liability insurance company owned by physicians, run by professionals, with physician input in all areas in which there is need of physician expertise. We welcome the opportunity to discuss the advantages and benefits represented by our program of coverage.

**Key Pharmaceuticals Booth #72**

2000 Galloping Hill Road  
Kenilworth, NJ 07033  
1-800-327-0592

Key Pharmaceuticals, the world leader in drug delivery systems, proudly displays the "Dur Family" of drugs, consisting of the most advanced drug delivery technology in the industry. On Exhibit will be our complete line of cardiovascular Rx products. NITRODUR II, K-DUR20, QUINADUR and NORMADYNE. Clinical studies, hands on product, demonstration, patient aids, and request for any information, samples, etc., will be provided.

**Knoll Pharmaceuticals Booth #67**

30 North Jefferson Road  
Whippany, NJ 07981  
(201)887-8300

**Lederle Laboratories Booth #38**

1800 Valley Road  
Wayne, NJ 07470  
(201)831-7077

Lederle has a 80-year reputation for pharmaceutical excellence. This Standard Products line offers over 200 generic products from which to choose. Over 700 Lederle professionals service your every need. We're easy to do business with. Good medicine and good business . . . shouldn't we be doing business?

Lederle Standard Products — Generics you dispense with confidence.

**Louisville Andrology Booth #103**

250 East Liberty Street, Suite 100  
Louisville, Kentucky 40202  
(502)581-1162

**Marion Laboratories Booth #26**

9300 Ward Parkway  
Kansas City, MO 64114  
(816)966-4000

We are proud to be in attendance again, and hope you will stop by and let our representatives answer your questions about Marion products. Featured will be CARDIZEM® (diltiazem HCl), CARAFATE® (sucralfate).

**McKay Reed Company Booth #40**

620 South Third Street  
Louisville, Kentucky 40207  
(502)584-2161

Selling "Good Ole John Hancock" and servicing the contracts that we sell.



**McNeil Consumer Products Company Booth #45**

1411 Opus Place, Suite 656  
Downers Grove, Illinois 60515  
(312)969-2772

McNeil Consumer Products company invites you to visit our exhibit, featuring **TYLENOL®** acetaminophen products, and other fine McNeil products. Extra-Strength **TYLENOL®** Caplets will be highlighted, together with other **TYLENOL®** products, including Junior-strength **TYLENOL®** Caplets. Also available will be samples and literature introducing our new 200-mg. ibuprofen product **MEDIPREN®**, the **PEDICARE®** line of symptom-specific children's cold products, **IMODIUM®** (loperamide hydrochloride), an anti-diarrheal, and **DELSYM®** (dextromethorphan polistirex), a 12-hour cough suppressant. Professional samples, information aids and patient education materials will be available as a service to the health care profession. We encourage your attendance at our exhibit.

**Mead Johnson Nutritional Division Booth #36**  
2404 Pennsylvania Avenue  
Evansville, IN 47721-0001  
(812)429-7764

**Mead Johnson Pharmaceutical Division Booth #56**

2404 W. Pennsylvania Street  
Evansville, IN 47721  
(812)429-7772

You are invited to visit the Mead Johnson Pharmaceutical division exhibit where our Medical Representatives will be pleased to discuss products of interest to you.

**Medical Management Resources Booth #58**  
10401 Linn Station Road, Suite 123  
Louisville, KY 40223  
(502)429-5266

The complexity of maintaining a modern medical practice that is both efficient and economical is difficult. Medical Management Resources simplifies that process by offering office automation and practice management services as one packaged item. The consolidation of services ensures the physician the maximum productivity at the most economical cost. Routine billing, insurance filing, both on paper or electronically, maintenance of HMO, and other prepaid health plans are but a few of the features of this comprehensive system. As a subsidiary of Community Mutual Insurance Company, fourth largest Blue Cross and Blue Shield in the country, Medical Management Resources has access to the resources to keep pace with the fast-changing medical market.

**Mediscus Products, Inc. Booth #60**  
4235 Produce Road  
Louisville, Kentucky 40218  
(502)964-1977

The Mediscus Air Support Therapy System is the result of nearly fifteen years of research and clinical input from health care professionals worldwide.

The primary applications of the System are the treatment and prevention of pressure sores and the management of intractable pain. This is accomplished with 21 waterproof, yet vapor permeable air sacs which support the patient on a temperature controlled environment which are pressure adjustable to maintain body surface pressure below capillary closure.

**Merck Sharp & Dohme Booth #42**  
West Point, Pennsylvania 19486  
(215)661-5349

**Methodist Evangelical Hospital Booth #28**  
315 East Broadway, P.O. Box 843  
Louisville, Kentucky 40201-0843  
(502)562-2689

Methodist Evangelical Hospital (MEH) prides itself in the high quality medical care that members of the MEH team deliver to patients. Among the many services offered by MEH are the Breast Evaluation Center, Sleep Study Center, Eye Laser Center, Diabetes Care Center, Cardiovascular Diagnostic Center, and the Joint Reconstruction Center. The Joint Reconstruction Center is on exhibit this year. The Center provides specialized care to patients having total hip or knee replacements as well as elbow, shoulder, and ankle reconstruction.

**Miles Pharmaceuticals Booth #87**  
P.O. Box 24304  
Louisville, Kentucky 40224  
(502)244-1984

**Mony Financial Services Booth #78**  
420 Hurstbourne Lane  
Louisville, Kentucky 40224  
(502)426-7070

Mony Financial Services provides professional sales solutions to your personal and business financial needs. Some of the many services we at Mony Financial offer include Life and Health Insurance, Pension, Variable Annuities, Group Insurance, Tax Sheltered Investments and Discount Brokerage. It is through these products and a variety of options that we are able to create a plan to meet the goal of maximum financial security.

**Norton Psychiatric Clinic                      Booth #88**

P. O. Box 35070  
Louisville, Kentucky 40232-5070  
(502)562-8850

The Norton Psychiatric Clinic is a full-service psychiatric inpatient and outpatient service attached to a pediatric and adult medical hospital. Treatment program includes use of multi-discipline team consisting of psychiatry, psychology, social work, nursing, expressive therapy, and group activities. Cognitive therapy is utilized. Program specialties include Geriatrics, Alcohol/Drug Abuse, Adolescent Treatment Program, Eating Disorders, Depression in Adults.

**Norwich Eaton Pharmaceuticals, INC.    Booth #10**

17 Eaton Avenue  
Norwich, NY 13815  
(607)335-2386

**Olympus Corporation                              Booth #7**

1805 Crossgate Lane  
Louisville, Kentucky 40222  
(502)426-9370

Please stop at the Booth and say "Hi." We will be showing all new upper GI Scopes, Colonoscopes, Broncho Fiber Scopes. A new flexible Sigmoidoscope. Olympus — "Superiority You Can See."

**Ortho Pharmaceutical Corporation    Booth #1**

Route 202  
Raritan, NJ 08869  
(201)218-6943

Ortho Pharmaceutical Corporation will present the most complete line of medically accepted products for the control of conception. The ORTHO-NOVUM\* brands, which are the country's most frequently prescribed oral contraceptives, will be on display. The first tri-phasic oral contraceptive, ORTHO-NOVUM 7/7/7, will be featured. Also featured will be a wide variety of educational aids and gynecological therapeutic products.

\*Trademark.

**Our Lady of Peace Hospital                      Booth #68**

2020 Newburg Road  
Louisville, Kentucky 40205  
(502)451-3330

Our Lady of Peace Hospital is one of the largest private psychiatric hospitals in the country. Through the years, Our Lady of Peace has earned a reputation for excellence in patient care. Ours is a specialized, short-term, acute-care hospital with programs for adults, adolescents, and children. Substance abuse programs for men, women and adolescents, as well as a special treatment program for cocaine dependency are offered. 24-hour admission and physician referral are available.

**Parke-Davis    Booth #76**

201 Taber road  
Morris Plains, NJ 07950  
(201)540-3182

We invite you to visit the Parke-Davis Booth where our Sales Representatives welcome the opportunity to discuss and assist you regarding Parke-Davis Products. We hope you will join us.

**Pennwalt Corporation, Prescription Division    Booth #93**

P. O. Box 1766  
Rochester, NY 14603  
(716)475-9000

**Pfizer Laboratories                                      Booth #91**

235 East 42nd Street  
New York, NY 10017  
(502)241-1082

Servicing the medical profession with leaders in pharmaceutical products "FELDENE"; "PRO-CARDIA"; "MINIPRESS"; "MINIZIDE"; "DIABINESE"; VIBRA-TABS.

**Princeton Pharmaceutical Products Booth #77**

P. O. Box 4000  
Princeton, NJ 08543-4000  
(609)921-4624

You are cordially invited to visit the Princeton Pharmaceutical Products booth to discuss your patient's needs including oral Prolixin, Prolixin Decanoate, Corgard and Corzide.

**Professional Office Systems, Inc.    Booth #32**

1804 Cargo Court  
Louisville, Kentucky 40299  
(502)491-1381

PRACTICE MANAGEMENT SPECIALISTS  
Color Coded Filing Systems — Filing Equipment — Mobile Shelving — File conversions — Peg-board Accounting Systems: Superbills, Receipts, Checks, Journals, Day Sheets, Envelopes, Statement, Ledgers, Storage Binders.  
FREE CONSULTATION  
Medical Society Purchasing Plan — member contractor.



**Ransdell Surgical, Inc.** Booth #48  
752 Barret Avenue  
Louisville, KY 40204  
(502) 584-6311

Medical products and services — the need exists. And it is our endeavor to fulfill these needs in the most efficient and cost-effective manner. We distribute popular brands you know and trust. Our innovative warehousing techniques, inventory control, dependable delivery, and financial stability are indicative of our high standards, but we consider the skill and dedication of our people our greatest asset. Ransdell Surgical... dedicated to the support of the Kentucky and Southern Indiana Healthcare Provider.

**Riker Laboratories, Inc./3M** Booth #34  
Building 225 - 15 - 07  
3M Center  
St. Paul, MN 55144  
(612)736-5814

**Roche-Biomedical Laboratories, Inc.** Booth #27  
6370 Wilcox Road  
Dublin, OH 43107  
Medical Reference Laboratory and clinics.

**Rorer Pharmaceuticals** Booth #84  
500 Virginia Drive  
Ft. Washington, PA 19034  
(215)628-6368  
We are pleased to be part of this medical meeting and welcome your visiting our exhibit. Representatives will be available to discuss pharmaceuticals manufactured by Rorer Pharmaceuticals including LOZOL®, CALCIMAR®, NITROLIQUAL® Spray, Slo-Bid™, and AZMACORT™.

**Ross Laboratories** Booth #50  
625 Cleveland Avenue  
Columbus, OH 43216  
(614)227-3571  
Ross Laboratories cordially invites you to stop by our Booth #50. Makers of a complete line of pediatric nutritional for the growing infant in the first year.

Ross Laboratories also offers a complete line of medical nutritional for patients to ensure adequate nutrition, vitamins and minerals.

We will also be sharing our service and educational items.

**Sandoz Pharmaceuticals** Booth #37  
59 Route 10  
East Hanover, NJ 07936  
(201)386-8167

Sandoz Pharmaceuticals invites you to stop by our exhibit where our representatives will be pleased to provide information on our products and educational materials that we have available.

**Schering Corporation** Booth #2  
Galloping Hills Road  
Kenilworth, NJ 07033  
(201)558-4000

**Searle Pharmaceuticals, Inc.** Booth #70  
P. O. Box 5110  
Chicago, Illinois 60680  
(312) 470-6712

**Skycare, Inc.** Booth #99  
217 E. Chestnut Street  
Louisville, Kentucky 40202-1886  
(502)587-4788

**Smith Kline & French Laboratories** Booth #61  
P. O. Box 7929 — E22  
Philadelphia, PA 19101  
(215)751-3668

Representatives will be on hand to answer your specific questions and to provide information on our products and services.

**Southern Medical Association** Booth #6  
35 Lake Shore Drive  
P.O. Box 190088  
Birmingham, Alabama 35219  
(205)945-1840

Southern Medical Association will have information available on the advantages of membership, such as Dial Access, Video Access, Special Seminars and Section Meetings, the Annual Scientific Assembly, the SOUTHERN MEDICAL JOURNAL, and the SMA Auxiliary. Also, material will be available on other benefits to members: the IRA, Retirement and Insurance Programs, Endowment Fund, Loans and Scholarships, Hyatt Hotels Gold Passport, Visa Premier Gold Card, and the Physicians' Purchasing Program.

**Stuart Pharmaceuticals** Booth #17  
Wilmington, DE 19897  
(800)441-7758

**The I-M Group, Inc. Booth #9**

P. O. Box 1862  
Owensboro, KY 42302-1862  
(502)926-4781

THE I-M GROUP, INC. provides products and services for the business side of medical practices. MEDICOMS, our practice management computer system provides statements, insurance forms, open-item account aging, a delinquent account subsystem, referring patient analysis, procedural/diagnosis analysis, free-form notes... The PRACTICE ADMINISTRATION SERIES (Video Cassettes and Instruction manuals available) includes: "An Introduction to Business in Medicine," "Efficient Office Management," "Internal Collections," "Computers in the Medical Office," and "Developing a Policy and Procedures Manual." Consulting and seminars also available.

**The Lang Company Booth #44**

540 South 13th Street  
Louisville, Kentucky 40203  
(502)584-2383

Automated Medical Practice Management "Turnkey" System featuring multi-user, multi-tasking hardware and software. Electronic claims processing available. Systems are fully supported locally.

**The Medical Protective Company Booth #43**

5814 Reed Road  
Fort Wayne, IN 46815  
(219)485-9622

The Medical Protective Company provides unexcelled protection in any claim for damages based on professional services rendered or which should have been rendered. The Company's experience from the successful handling of over 15,000 claims during 88 years of Professional Protection Exclusively is unparalleled in the liability field.

**The Upjohn Company Booth #16**

4910 Para Drive  
Cincinnati, OH 45237  
1-800-543-0278

**UAD Laboratories, Inc. Booth #52**

6635 Highway 18 West  
Jackson, MS 39209  
(601)372-7773

**U.S. Airforce Booth #102**

110 21st Avenue, South  
Room 712  
Nashville, TN 37203

**U.S. Army Health Professional Support Agency Booth #79**

1900 Half Street, Southwest  
Washington, DC 20324-2000  
(202)475-1079

**Upjohn Healthcare Services Booth #46**

4000 DuPont Circle, Suite 105  
Louisville, Kentucky 40207  
(502)895-4213

**W. B. Saunders Booth #75**

3067 Lupine Court  
Indianapolis, IN 46224  
(317) 299-2551  
The W. B. Saunders Company  
Philadelphia, PA

**Wallace Laboratories Booth #54**

Half Acre Road  
Cranbury, NJ 08512  
(609)655-6143

**Westwood Pharmaceuticals Booth #3**

100 Forest Avenue  
Buffalo, NY 14213  
(716)887-3678

**Whitehall Laboratories Booth #29**

685 Third Avenue  
New York, NY 10017  
(212)878-5073

**Winthrop Pharmaceuticals Booth #19**

3600 Constantine Drive  
Prospect, Kentucky 40059  
(502)228-4501

**Wyeth Laboratories Booth #85**

P. O. Box 8299  
Philadelphia, PA 19101  
(215)341-2213



# Technical Exhibits

The Technical Exhibits at the 1987 KMA Annual Meeting will feature the latest developments in medical techniques and information. Located in the Ramada Inn East Convention Center, the exhibits will condense a volume of information and ideas in such a manner that a vast amount of knowledge can be secured in a short period of time.

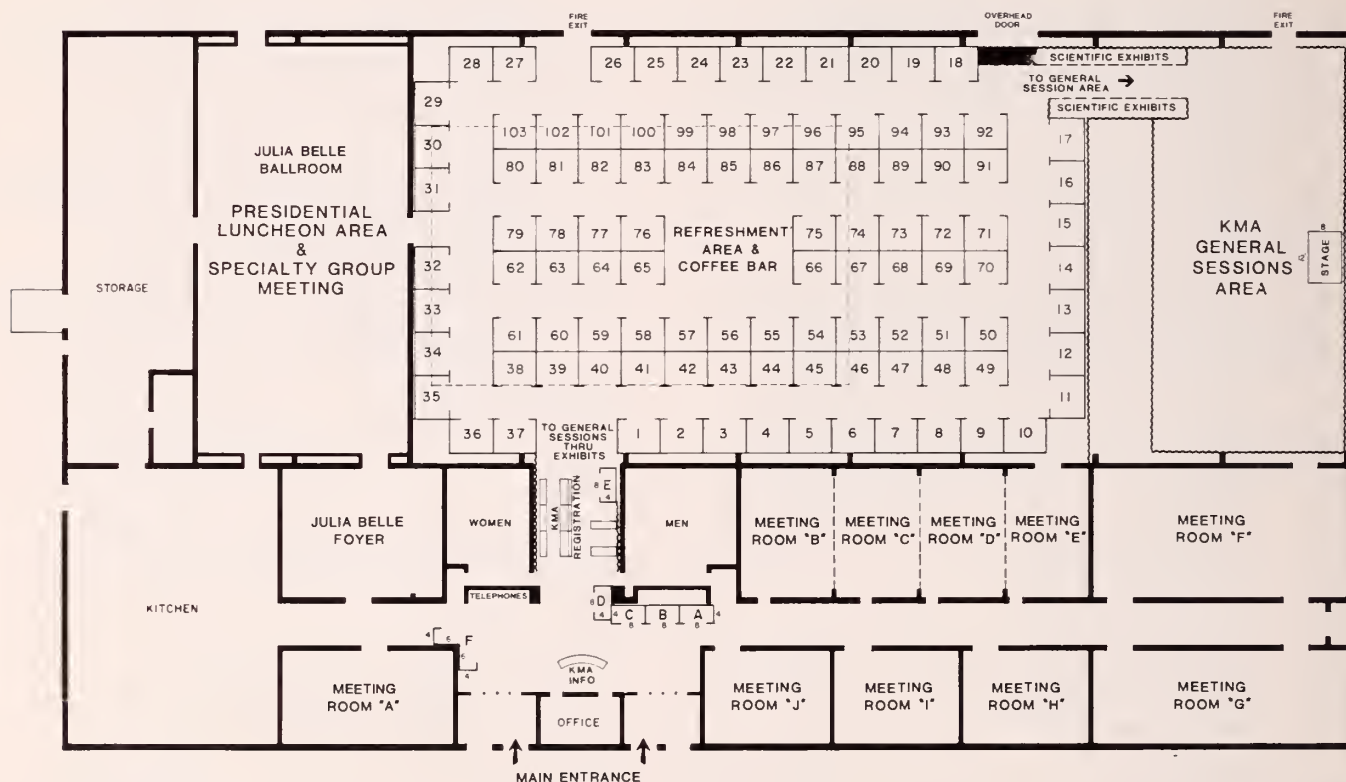
Prepared carefully and skillfully to appeal to you, the physician, the exhibits are especially geared to your special interests as a practitioner. Medical rep-

resentatives and other exhibitors will be on hand to discuss personally their products and services with you. Both you and your patients should benefit from the information that can be gained from a visit to the Technical Exhibits.

Thirty-minute intermissions have been planned during each general and specialty group session so that every physician may take advantage of this excellent opportunity provided by the exhibits.

## KENTUCKY BLUEGRASS EXPO CENTER

RAMADA INN - 164 at HURSTBOURNE LANE  
LOUISVILLE, KENTUCKY



PREPARED BY  
*Geo E Fern co*  
328 LOUISVILLE AIR PARK  
LOUISVILLE, KY 40213  
TELEPHONE (502) 361-0294  
R-1 11/8/86

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***The McDowell/Crawford Ball***

will be held

Sunday, Sept. 13, 1987

in the

Emerald Room

Big Spring Country Club

Louisville

*Invitations and RSVP cards will be mailed*



# Bob M. DeWeese, M.D., Nominated for KMA President-Elect



Bob M. DeWeese, M.D., has been nominated by the KMA Fifth District Delegation and the Jefferson County Medical Society for the office of President-Elect of the Kentucky Medical Association.

Doctor DeWeese, a native of Ballard County, Kentucky, received a Bachelor of Science degree from the University of Kentucky in 1957, and an M.D. degree from the University of Louisville in 1961. He completed a General Surgery residency at the University of Louisville Hospitals in 1966 and has been in the private practice of surgery since that time. Doctor DeWeese is an Assistant Professor of Clinical Surgery at the University of Louisville School of Medicine. He is a Fellow of the American College of Surgeons, a Diplomate of the American Surgery Board, and a member of the Kentucky Surgical Association.

Doctor DeWeese is a past President of the Jefferson County Medical Society and the Louisville Surgical Society. He has served KMA as Fifth District Trustee for the past six years; as Vice Chairman of the Board of Trustees for 1986-87; and on numerous committees. He is a member of Saint Paul United Methodist Church in Louisville, where he currently is serving on the Board of Trustees. Doctor DeWeese and his wife, Angela, have four children.

## Make Your Reservations Now

It is important that you begin to make your room reservations as soon as possible for the KMA Annual Meeting, September 14-17. The Ramada Inn/Bluegrass Convention Center at I-64 and Hurstbourne Lane will be the Headquarters Hotel. However, there are several other accommodations within easy reach of Ramada Inn and Bluegrass Convention Center. In making your reservations, remember the first House of Delegates meeting will be Monday, September 14.

In acute and chronic edema due to CHF

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Before prescribing, please consult complete product information, a summary of which follows:

**WARNING:** Bumex (bumetanide/Roche) is a potent diuretic which, if given in excessive amounts, can lead to a profound diuresis with water and electrolyte depletion. Therefore, careful medical supervision is required, and dose and dosage schedule have to be adjusted to the individual patient's needs. (See under DOSAGE AND ADMINISTRATION in complete product information.)

**INDICATIONS AND USAGE:** Edema associated with congestive heart failure, hepatic and renal disease, including the nephrotic syndrome.

Almost equal diuretic response occurs after oral and parenteral administration of Bumex. If impaired gastrointestinal absorption is suspected or oral administration is not practical, Bumex should be given by the intramuscular or intravenous route.

Successful treatment with Bumex following instances of allergic reactions to furosemide suggests a lack of cross-sensitivity.

**CONTRAINDICATIONS:** Anuria. Hypersensitivity and in patients in hepatic coma or in states of severe electrolyte depletion. Although Bumex can be used to induce diuresis in renal insufficiency, any marked increase in blood urea nitrogen or creatinine, or the development of oliguria during therapy of patients with progressive renal disease, is an indication for discontinuation of treatment.

**WARNINGS:** Dose should be adjusted to patient's needs. Excessive doses or too frequent administration can lead to profound water loss, electrolyte depletion, dehydration, reduction in blood volume and circulatory collapse with the possibility of vascular thrombosis and embolism, particularly in elderly patients.

Prevention of hypokalemia requires particular attention in patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis and ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, certain diarrheal states, or other states where hypokalemia is thought to represent particular added risk to the patients.

In patients with hepatic cirrhosis and ascites, sudden alterations of electrolyte balance may precipitate hepatic encephalopathy and coma. Treatment in such patients is best initiated in the hospital with small doses and careful monitoring of the patient's clinical status and electrolyte balance. Supplemental potassium and/or spironolactone may prevent hypokalemia and metabolic alkalosis in these patients. In cats, dogs and guinea pigs, Bumex has been shown to produce ototoxicity. Since Bumex is about 40 to 60 times as potent as furosemide, it is anticipated that blood levels necessary to produce ototoxicity will rarely be achieved. The potential for ototoxicity increases with intravenous therapy, especially at high doses.

Patients allergic to sulfonamides may show hypersensitivity to Bumex.

**PRECAUTIONS:** Measure serum potassium periodically and add potassium supplements or potassium-sparing diuretics, if necessary. Periodic determinations of other electrolytes are advised in patients treated with high doses or for prolonged periods, particularly in those on low salt diets.

Hyperuricemia may occur. Reversible elevations of the BUN and creatinine may occur, especially with dehydration and in patients with renal insufficiency. Bumex may increase urinary calcium excretion. Possibility of effect on glucose metabolism exists. Periodic determinations of blood sugar should be done, particularly in patients with diabetes or suspected latent diabetes.

Patients should be observed regularly for possible occurrence of blood dyscrasias, liver damage or idiosyncratic reactions.

Especially in presence of impaired renal function, use of parenterally administered Bumex should be avoided in patients to whom aminoglycoside antibiotics are also being given, except in life-threatening conditions.

Drugs with nephrotoxic potential and bumetanide should not be administered simultaneously.

Since lithium reduces renal clearance and adds a high risk of lithium toxicity, it should not be given with diuretics.

Probenecid should not be administered concurrently with Bumex.

Concurrent therapy with indomethacin not recommended.

Bumex may potentiate the effects of antihypertensive drugs, necessitating reduction in dosage.

Interaction studies in humans have shown no effect on digoxin blood levels.

Interaction studies in humans have shown Bumex to have no effect on warfarin metabolism or on plasma prothrombin activity.

**Pregnancy:** Bumex should be given to a pregnant woman only if the potential benefit justifies the potential risk to the fetus.

Bumetanide may be excreted in breast milk.

**Pediatric Use:** Safety and effectiveness below age 18 not established.

**ADVERSE REACTIONS:** Muscle cramps, dizziness, hypotension, headache and nausea, and encephalopathy (in patients with preexisting liver disease).

Less frequent clinical adverse reactions are weakness, impaired hearing, rash, pruritus, hives, electrocardiogram changes, abdominal pain, arthritic pain, musculoskeletal pain and vomiting.

Other clinical adverse reactions are vertigo, chest pain, ear discomfort, fatigue, dehydration, sweating, hyperventilation, dry mouth, upset stomach, renal failure, asterixis, itching, nipple tenderness, diarrhea, premature ejaculation and difficulty maintaining an erection.

Laboratory abnormalities reported are hyperuricemia, azotemia, hyperglycemia, increased serum creatinine, hypokalemia, hypotatremia, hyponatremia, and variations in CO<sub>2</sub> content, bicarbonate, phosphorus and calcium. Although manifestations of the pharmacologic action of Bumex, these conditions may become more pronounced by intensive therapy.

Diuresis induced by Bumex may also rarely be accompanied by changes in LDH, total serum bilirubin, serum proteins, SGOT, SGPT, alkaline phosphatase, cholesterol, creatinine clearance, deviations in hemoglobin, prothrombin time, hematocrit, platelet counts and differential counts. Increases in urinary glucose and urinary protein have also been seen.

**DOSAGE AND ADMINISTRATION:**

**Oral Administration:** The usual total daily dosage is 0.5 to 2.0 mg and in most patients is given as a single dose.

**Parenteral Administration:** Administer to patients (IV or IM) with GI absorption problem or who cannot take oral. The usual initial dose is 0.5 to 1 mg given over 1 to 2 minutes. If insufficient response, a second or third dose may be given at 2 to 3 hour intervals up to a maximum of 10 mg a day.

**HOW SUPPLIED:** Tablets, 0.5 mg (light green), 1 mg (yellow) and 2 mg (peach), bottles of 100 and 500. Prescription Paks of 30. Tel-E-Dose<sup>®</sup> cartons of 100. Imprint on tablets: 0.5 mg—ROCHE BUMEX 0.5, 1 mg—ROCHE BUMEX 1, 2 mg—ROCHE BUMEX 2.

**Ampuls:** 2 ml, 0.25 mg/ml, boxes of ten.

**Vials:** 2 ml, 4 ml and 10 ml, 0.25 mg/ml, boxes of ten.

P. 1. 0985



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M.D.S.



Rex Inerstrom MD

Black Widow  
Spider Bite  
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### Don't Curse the Mirror

**I**t is hard to believe that my last President's page has come so quickly. It has been an interesting, busy and very fast year. I hope my efforts have, at least in part, been commensurate with the honor you gave me when you elected me President.

I would like to make a few observations regarding Kentucky medicine.

First, after some 18 years of involvement in all levels of organized medicine in Kentucky, I believe that the Kentucky Medical Association rather faithfully reflects our profession—the strengths and weaknesses, the folly and the dignity, the selfishness and the dedication, the pettiness and the self-sacrifice. To those who criticize and demean organized medicine, I say it does no good to curse the mirror which reflects what is before it. Let us work to improve what the mirror sees.

Second, the liability crisis is rightfully our number one priority this year, but even this premier status does not indicate its importance. Med-

ical liability along with the other problems we face and will face—indigent care, third party involvement and interference with medical care, physician reimbursement, even AIDS—will be dealt with in the public forum. Frankfort, Washington, the media, the legislatures, and the courts will be where most of the major decisions will be made. This is an arena in which most of us are not comfortable and where we frequently do not do well. It is imperative that we become more active and more effective in this public forum. Our performance, regardless of the outcome, in the liability problem will be an acid test of our capabilities.

Third, we need an antidote to the malaise and negative attitude which pervades our profession. It has fallen our lot to practice medicine through a difficult and frustrating time. Our many problems tend to obscure our perspective and make us forget all the positive advantages we have such as education, social position, financial

status, public prestige, and involvement in, and at least partial control of, an indispensable service.

We can indeed be a formidable and successful force in the preservation and promotion of our profession if we only apply our talents and assets.

In closing, allow me to thank you again for the greatest professional honor I have ever received—the privilege of serving as the President of the Kentucky Medical Association.

**Richard F. Hench, MD**  
**KMA President**



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An aerial photograph of a large, modern stadium filled with spectators. The stadium is illuminated by bright lights, and the football pitch is visible in the center. The surrounding area includes parking lots, roads, and distant hills under a twilight sky. The text "...we had to find just the right room." is overlaid in the upper-middle section of the image.

...we had  
to find  
just the  
right room.



# 60,073 patients (90%) who started on INDERAL<sup>®</sup> LA stayed on INDERAL LA.<sup>1\*</sup>

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\*After a 30-day trial with INDERAL LA, physicians reported that 90% of the patients would remain on INDERAL LA.

## The one you know best keeps looking better

Please see next page for brief summary of prescribing information.



# The one you know best keeps looking better

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR)

## INDERAL® LA brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retreatment upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of Inderal has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. Inderal has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, Inderal also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

**INDICATIONS AND USAGE.** **Hypertension:** Inderal LA is indicated in the management of hypertension, it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS.** **CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it is usually advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior

to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOGLYCEMIA.** Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case, this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS.** **General.** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**Clinical Laboratory Tests.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**Pregnancy.** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

**Pediatric Use.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** lightheadedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

**Gastrointestinal:** nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** pharyngitis and agranulocytosis erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** bronchospasm.  
**Hematologic:** agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.  
**Auto-Immune:** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal tablets to Inderal LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg for mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg Inderal LA once daily.**

**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. Inderal LA National Compliance Evaluation Program. Data on file. Ayerst Laboratories.
2. Ravid M, Lang R, Jutrin I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985; 145:1321-1323.

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# Partial Paralysis Following a Black Widow Spider Bite

## Case Report and Literature Review

Harold Sternlicht, MD and Abe Fosson, MD

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*Black widow spider bites (latrodectus species) are the most serious cause of arachnidism in the United States. Their medical importance in the recent past has been small because of infrequent human exposure. With increasing popularity of outdoor woodland sports and encroachment on the domain of the black widow spider, more frequent envenomation may be expected. The venom is a potent neurotoxin that acts on the nerve endings to cause neurotransmitter depletion. Clinical manifestations of envenomation are: pain, muscle spasm, hypertension, and restlessness. Though treatment of black widow spider bite is usually symptomatic, a specific antivenin is available for those at high risk.*

*This report of a 17-year-old girl emphasizes unusual manifestations (transient partial paralysis and paresthesias) which might cause diagnostic confusion. Symptoms resolved during a 16-hour observation without specific treatment.*

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**L**atrodectus mactans, the black widow spider, is the best known and the most serious cause of arachnidism in the United States. The spider venom is a neurotoxin that causes little local reaction but produces pain and spasm in large skeletal muscles soon after the bite. Though partial paralysis has rarely been documented, we are now reporting a case of partial paralysis and loss of sensation unassociated with pain and spasm that spontaneously resolved in less than 16 hours.

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In October 1985, a 17-year-old white female was bitten on her left shoulder by a spider while she was seated in a slightly darkened area in the back of a classroom located on the ground floor of a two-story public school building. She described a large, shiny, black spider with a red hourglass pattern on its abdomen. She swatted and then repeatedly crushed the spider into the floor. Within 15 minutes she became nauseated and the area around the bite became erythematous and slightly swollen. These manifestations were quickly followed by vomiting and sharp, intermittent pain over the left shoulder. She was given methacarbamol and diazepam in the closest emergency room and referred to a university hospital. Upon arrival she was alert and oriented but seemed unusually unconcerned about her symptomatology. She denied muscle spasms, pain, restlessness or difficulty breathing but did complain of numbness in her left arm and thigh. Her temperature was 97.6°F, blood pressure 120/80 mm Hg., pulse 76, respirations were 30. On examination there was erythema and increased warmth over the left shoulder. Punctate lesions, presumed to be bite marks, were present approximately 3 mm apart on the left deltoid. She also had left lower quadrant abdominal tenderness without guarding or rigidity. Though her cranial nerves were intact, she had one-fifth weakness of her left deltoid, biceps, triceps, brachioradialis, wrist extensors, wrist flexors, and intrinsic hand muscles. She also had four-fifths weakness of the left lower extremity including quadriceps, biceps femoris, gastrocnemius, anterior and posterior tibialis. Her right extremities had full 5/5 strength. Her left arm from clavicle to fingers was insensitive to pin prick, as was her left thigh from knee to hip. She had decreased proprioceptive sense in her left upper extremity. Deep tendon reflexes were one-half in the left triceps and



biceps, 2/2 elsewhere. A white count was 9,800/cmm, hematocrit 37.1%, and differential of 71% segmented neutrophils, 3% bands, 18% lymphocytes, 4% monocytes, 3% eosinophils, and 1% basophils. Antivenin was not given because of an allergic reaction (wheal) to an intracutaneous test dose of horse serum. During 24 hours of close observation in hospital, full sensation and normal, 5/5 muscle strength returned.

### **Discussion**

Descriptions of *latrodectus mactans* are usually of the female, typically a jet black spider with bright red marking on the abdomen. These females have a body 15 mm in length and a leg spread of about 40 mm. Their ventral abdomen pattern varies from red blotches to the classic hourglass pattern, partly depending on age and number of moltings. Males are about 20 times smaller than the females and have not been known to bite humans.<sup>1</sup> Contrary to popular belief, the male is not routinely eaten by the female following the mating process, and may share her web.<sup>2</sup> Black widow spiders are not aggressive and bite only when threatened or the web disturbed.

The range of the black widow spider includes most of southern North America. In the past, southern out-houses were a common context for black widow spider bites because of the damp, dimly lit conditions and the large number of flies that served as prey. In other geographic situations the epidemiology of spider bites differs. In South Africa, many farmers had been bitten by species of *latrodectus* while collecting sheaths of wheat.<sup>3</sup> The majority of 2,144 red-back spider bites in Australia reported by Sutherland and Trinca occurred when the spider was disturbed in man-made objects, such as clothing and furniture.<sup>4</sup>

### **Envenomation**

Black widow venom is a very potent neurotoxin. The venom acts specifically on nerve endings to cause depletion of the acetylcholine in motor end plates and release of catecholamines from adrenergic nerve endings. The clinical result is a patchy paralysis of voluntary muscles and variable changes in the autonomic nervous system.<sup>4</sup> The amount of venom injected is dependent on the maturity of the spider and vigor of muscular action on the venom glands.

### **Clinical Manifestation**

The progression of signs and symptoms after envenomation are sufficiently distinctive and predictable to allow clinical differentiation. The first symptom of *latrodectus* bite may be a pinprick sensation at the site, but this is often unnoticed. The degree of subsequent local reaction is controversial. Doctor Blair reported local throbbing and swelling,<sup>5</sup> a Hawaiian review and the review by Rauber were ambiguous,<sup>2,6</sup> and Kobernick denied local symptomatology.<sup>7</sup> After a lag period of 10 to 30 minutes more generalized symptoms develop. Pain beginning in regional lymph nodes and local muscle groups spreads to large muscle groups and other extremities. This is usually associated with muscle spasms. Sensations (often severe) of abdominal pressure and cramping are common. The aggregate constellation of clinical findings supports consideration of a surgical abdomen in many cases. The following difference helps identify the patients properly: while the patient with a surgical abdomen seeks comfort in splinting and inactivity, the patient with a black widow spider bite seeks comfort in shifting positions and markedly restless activity.

Rare symptoms include priapism, atrial fibrillation, paresthesias, and paralysis.<sup>4,6,8,9</sup> Cases of black widow spider bites have been included as "exotic nonpolio cause of a polio like paralytic syndrome" in the review by Gear, but no specific examples were cited.<sup>10</sup> Jacobs reported a 13-year-old boy with transient partial paralysis, diminished sensation over the left calf, and pain following a black widow spider bite.<sup>9</sup> His paralysis progressed for several days but was always limited to his lower extremities. All symptoms resolved within five months. Jacobs concluded that a peripheral polyneuritis and polymyositis were due to envenomation directly or immunologically.

Table 1 is a review of symptoms of 2,144 red-back spider bites in Australia by Doctors Sutherland and Trinca.<sup>4</sup> These spiders are related to black spiders, and paresthesias have been reported in 10% of bite victims.

Two features of our case are particularly unusual: lack of severe pain and brief duration of the motor/sensory deficits. The differential diagnosis of our patient must certainly include hysteria, cerebrovascular accident and postictal phenomenon. Identification of the perpetrator and bite marks confirmed the diagnosis in our case; however, black widow spider bites have been added to our "possible causes" list for several neurological symptoms.

TABLE 1

## SIGNS AND SYMPTOMS

The proportions of the main signs and symptoms of red-back spider bite in 2,144 cases are shown as follows.

### Local effects

- Pain 76%
- Erythema 33%
- Oedema 24%
- Heat 19%
- Pruritus 4%

### Regional effects

- Pain and swelling of regional lymph nodes 19%

### General effects

- Pain other than at bite site 39%
- Nausea or vomiting 20%
- Sweating 15%
- Malaise 10%
- Paraesthesia 10%
- Pyrexia 8%
- Insomnia 8%
- Dizziness 8%
- Headache 4%
- Rash 4%
- Hypertension 3%

20% of these cases were inadequately reported: of the 2,144 cases at least 95.7% received antivenom and thus the syndrome of latrodectism would be modified to some extent.<sup>4</sup>

## Treatment

Interventions depend mainly on host factors. Those at highest risk are: infants, the elderly, individuals with hypertensive disease (or past history of same), and patients manifesting acute respiratory distress. The Hawaiian Poison Center recommends overnight hospital based observation only for symptomatic, healthy adults (age 16-60), and antivenin for all children, all elderly victims, patients with hypertension and symptomatic adults.

Antivenin is a biological preparation derived from horses and carries the risk of hypersensitivity and serum sickness. Administration should be preceded by a test dose. The therapeutic dose of the antivenin is one vial (2.5 cc) given in 0.5 cc aliquots. Injection sites should be selected on the distal portions of extremities so tourniquets can be used to retard antivenin entry into general circulation should manifestations of allergy develop.

Other measures include intravenous calcium gluconate, diazepam and beta blockers. Calcium gluconate works by an unknown mechanism to counteract the muscle spasms and neuromuscular blocking effect of the venom.<sup>6</sup> Calcium has been found to be more effective than methacarbamol, which also decreases spasms.<sup>7</sup>

It should be administered with cardiac monitoring. Diazepam is as effective as methacarbamol and is more readily available. Symptomatic pain relief with diazepam may require large doses which should be used carefully. Hypertension is usually controlled with muscle relaxants and analgesias, but specific antihypertensive medications may be required. In the rare case with cardiac arrhythmias, beta blockers should be used to ameliorate effects of elevated levels of circulating catecholamines.

## Conclusions

This case of human black widow spider envenomation, when placed in the context of relevant literature, has typical and unusual features. The transient partial paralysis and paresthesias are particularly uncommon and would at least initially suggest hysterical symptoms. Therefore, specific questions regarding spider bites should be pursued in patients with a brief history of these symptoms presenting in the warm weather months. It is quite likely that the growing popularity of outdoor activities will increase contact between man and spider and chances for envenomation. There were 23,491,000 visits to Kentucky State Parks in 1985, and visits are expected to increase at the rate of 500,000 per year.

- References**
1. Weitzman S, Margulis G, Lehmann E: Uncommon cardiovascular manifestations and high catecholamine levels due to "black widow" bite. *Am Heart J* 1977 Jan; 93(1) p 89-90.
  2. Rauber A: Black widow spider bites. *J Toxicol Clin Toxicol* 1983-84; 21(4-5) p 433-85.
  3. Finlayson M: "Knopie-Spider" bite in Southern Africa. *Medical Proceedings*. 2 Dec 1956, p 634-638.
  4. Sutherland SK, Trinca JC: Survey of 2,144 cases of red-back spider bites: Australia and New Zealand. 1963-76. *Med J Australia* 1978; Dec 30;2(14) p 620-3.
  5. Breslin FI, Pierone RE: Dr. Blair and the black widow spider. *J Med Assoc State Ala* 51(2). August 1981, 58.
  6. Weinstein SR, Scottolini AG: Latrodectus spider bites in Hawaii. Case report and literature review. *Hawaii Med J* 1983 Dec; 42(12) p 426-7.
  7. Kobernick M: Black widow spider bite. *Am Fam Physician* 29(5) May 1985, p 241-5.
  8. Striles AD: Priapism following a black widow spider bite. *Clin Pediatrics* 1982;21:179-85.
  9. Jacobs W: Possible peripheral neuritis following a black widow spider bite. *Toxicon*. May 1969;6(4) p 299-300.
  10. Gear JH: Nonpolio causes of polio-like paralytic syndromes. *Rev Infectious Disease* 1984; May-June 66 suppl 2: p 5479-84.
  11. Verbal communication from Kentucky Department of State Parks, Frankfort, KY. Apr 30, 1986.



# Percutaneous Transluminal Coronary Angioplasty

## A Timely Procedure When Justified

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*In this study, we review our experience with our initial 407 patients undergoing transluminal coronary angioplasty. The purpose of this study is to evaluate the results and risks of coronary angioplasty with additional consideration of the indications for the procedure and the cost benefit ratio. This study demonstrates that by careful patient selection and with current technology available, coronary angioplasty can be performed with a 90% overall success rate, with a 12.5% restenosis rate, and with a very acceptable complication rate (mortality of 0.7% and emergency coronary bypass graft surgery required in 4.4%). Coronary angioplasty will assume an increasing role in the management of patients with coronary artery disease, but will require careful patient selection and physician training to perform the procedure.*

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**P**ercutaneous transluminal coronary angioplasty (PTCA) has become a vital and established mode of treatment for patients with coronary artery disease. In 1983, over 27,000 PTCA procedures were performed, and in 1986 that number will surpass 100,000.<sup>1</sup> Like all new procedures, there remain unanswered questions and criticisms as to the proper role of this procedure in the treatment of patients with coronary artery disease.

Three questions need to be asked of any cardiologist performing PTCA or by any physician referring patients for PTCA. The questions are: true indication for the procedure; cost benefit ratio to the patient; and risks of the procedure. Statistics provided by the operator(s) performing PTCA should answer the above questions. The purpose of this study is to answer the above noted questions using a retrospective analysis of our initial coronary angioplasty data.

### Methods - Patients

Between March 1982, and January 1986, elective PTCA was attempted in 407 patients. All patients have a minimum six months of follow-up since most restenoses occur within this time.<sup>2</sup> The criteria for patient selection was unstable angina pectoris or chronic disabling angina pectoris with objective evidence of ischemia proven by exercise testing and coronary anatomy suitable for dilatation with a minimal stenosis of 70% diameter occlusion. Chest pain was recorded as "chronic stable angina" or "unstable angina" according to CASS and NHLBI PTCA Registry criteria.<sup>3</sup> Ninety-five percent of the patients underwent elective PTCA using the brachial approach, and 5% of patients the femoral approach. The experience in these patients includes an evolution of the equipment from the original fixed wire-tipped balloon dilation catheter technique to the current steerable exchangeable balloon dilation catheter technique. All PTCA procedures were performed with cardiovascular surgical standby. The criteria for success also changed with the evolution of the procedure initially using the criteria of reducing the gradient to one-half of the original gradient; and more recently, at-

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tempting to reduce gradients to less than 15 mmHg. In patients with multiple vessel disease, PTCA was attempted first at the site considered to be the primary cause of symptoms. With increasing cases, complex angioplasty was performed on more difficult and high-risk patients.

### Definitions

(1) Single-vessel disease:  $\geq 70\%$  stenosis of the luminal diameter in only one major epicardial vessel.

(2) Multivessel disease:  $\geq 70\%$  stenosis in two or more major epicardial vessels.

(3) Successful PTCA: reduction of stenosis by at least 50% of the luminal diameter, without a complication requiring CABG.

(4) Clinical Restenosis: re-occurrence of typical angina pectoris post PTCA in the first year after the procedure and/or angiographic evidence of an increase in the diameter stenosis by  $>30\%$  after PTCA.

### Follow-up

Follow-up has been maintained on all patients at six month intervals by seeing the patient in routine office examination or if that was not possible, by telephone interview. At each follow-up, the presence and duration of symptoms were recorded as well as an exercise test performed whenever possible. Also recorded was the need for repeat PTCA or coronary artery bypass surgery. Follow-up angiographic examinations were performed in patients who had recurrent symptomatology suggestive of angina pectoris, patients with a positive exercise test for ischemia, and in patients who had continued chest pain and were not functional even though the pain was felt to be atypical for cardiac etiology.

### Results

Four hundred and seven patients were selected for elective PTCA in this study. Table I reveals the clinical characteristics of this study group. Male patients represented 72.5% of the study group and 27.5% were female. The age range was from 28 to 83 years of age with an average age of 56 years. The average duration of symptoms for this large study group was only five weeks, demonstrating the short duration of symptomatology in these patients. Unstable angina pectoris was noted in 339 (83.3%) of the patients. Patients experiencing Canadian Heart Class III angina pectoris represented 15.5% of the study group and five patients (1.2%) had Canadian Heart Class II angina pectoris.

TABLE I  
CLINICAL CHARACTERISTICS OF  
ELECTIVE PTCA PATIENTS

	Patients	Percent
Total Patients	407	100%
Male Patients	295	72.5%
Female Patients	112	27.5%
Previous M.I.	144	35.4%
Previous CABG	17	4.2%
Average Age	56 years old (Range 28-83)	
Average Duration	5 weeks	
Symptoms		

A total of 82% of the patients had single vessel disease and 18% had multiple vessel disease.

Tables II and III list the PTCA lesion data in patients undergoing elective PTCA. PTCA was successful in 364 patients and in that group there were 427 successful balloon dilatations. The mean stenosis was reduced from 90% to 25%. The average gradient was reduced from 60 mmHg. to 14 mmHg. Eighty-nine percent of the patients in this study had at least one lesion  $\geq 90\%$  diameter stenosis.

TABLE II  
PTCA LESION DATA

Average Initial Gradient	60 mmHg.
Average Final Gradient	14 mmHg.
Average Initial Diameter	90%
Average Final Diameter	25%
Lesion Size (Initial $\geq 90\%$ lesion)	89%

TABLE III  
PTCA SUCCESS

	Percent
Overall Successful Dilatation	90%
Pre-Steerable Guidewire Success	67%
Post Steerable Guidewire Success	95%
Clinical PTCA Restenosis	12.5%

Complications are listed in Table IV. Forty-three patients had unsuccessful coronary angioplasty. Prior to June 1984, only the original non-steerable fixed wire balloon dilatation catheters were available to us. Of the unsuccessful PTCA patients, 23 (5.7%) were patients in whom the lesion could not be crossed by the balloon dilatation catheter. All but two of these patients occurred before June 1984. Twelve patients (2.9%) were unsuccessful with the new steerable system with the lesion being crossed by the steerable guidewire but not by a balloon dilatation catheter. The remaining eight



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patients (2.0%) had coronary artery dissection and acute occlusion of the artery requiring emergency coronary artery bypass surgery. Six of these eight patients had dissection prior to June 1984. Emergency coronary artery bypass surgery was required in 4.4% of the patients. However, since June 1984, the emergency CABG complication rate has been 3.2%.

A total of three deaths have occurred in the original 407 study patients. These three deaths have occurred in the 18 patients requiring emergency CABG surgery. The first death occurred in 1983 in a patient who had unsuccessful coronary angioplasty of the left anterior descending artery. The patient left the catheterization laboratory with a normal electrocardiogram and stable hemodynamics, but he developed refractory ventricular arrhythmias during surgery and expired shortly thereafter. The other two deaths occurred in high-risk patients. High-risk patients are defined as those patients with compromised left ventricular function that are considered poor candidates for elective CABG surgery for non-cardiac reasons. Thirty-eight patients (9.3%) have been defined as high-risk patients in this study. Two of the three deaths were from that population. One patient had undergone previous CABG surgery nine years previously and was considered a poor risk for repeated surgery because of sternal infection and secondary mediastinal fibrosis. The other patient had significant underlying chronic obstructive pulmonary disease. Both patients had ejection fractions less than 40%.

### Follow-up

Average follow-up of the patients in this study was 11 months. Eleven patients (2.7%) have been lost to follow-up. At the time of this study, 84.6% of the patients are asymptomatic. Fourteen patients (3.4%) have typical angina pectoris and 49 patients (12%) have atypical chest pain most likely of non-cardiac etiology with associated negative exercise tolerance test for ischemia. Fifty-one patients (12.5%) have been classified as having clinical PTCA restenosis. Forty-one of the 51 patients have been angiographically proven to have PTCA restenosis. The indication for repeat catheterization was either recurrent symptomatology or a positive exercise test for ischemia. Most of these patients have undergone a second PTCA procedure although a few patients have opted for coronary artery bypass surgery. We have also included 10 of the 14 patients with typical angina pectoris who are stable on medical treatment and did not want to undergo repeat catheterization as patients having clinical PTCA res-

TABLE IV  
COMPLICATIONS

	Patients	Percent
Unable to cross lesion	23	5.7%
Lesion crossed wire only	12	2.9%
Coronary Artery Dissection	8	2.0%
Emergency CABG	18	4.4%
Death	3	0.7%

TABLE V  
FOLLOW-UP DATA

Average follow-up	Patients	Percent
Asymptomatic	344	84.6%
Symptomatic	63	15.4%
Typical Angina Pectoris	14	3.4%
Atypical Chest Pain	49	12.0%
Clinical PTCA restenosis	51	12.5%

tenosis. Seventy-five percent of the patients have returned to their previous occupation while 23% were previously retired from active occupation. Nine patients (2%) had previous medical disability and only one patient has cardiac disability.

### Discussion

Elective PTCA has evolved as a major method of treatment in coronary artery disease since 1977 when the first procedure was performed.<sup>4</sup> This study reviews 407 patients undergoing PTCA between 1982 and 1985. This study attempts to answer the questions raised at the beginning of this report which include the results and risks of the procedure, cost benefit ratio to the patient; and importantly, the indications for the procedure.

Multicenter randomized trials performed during the 1970's have shown that coronary artery bypass surgery cannot decrease the very low mortality for patients with single vessel disease.<sup>1,5</sup> In the past several years, the number of patients undergoing single vessel bypass surgery has decreased so that currently less than 10% of patients undergoing bypass surgery have single vessel disease.<sup>6</sup> Just as single vessel coronary bypass surgery was subject to abuse in the early 1970's, single vessel PTCA is subject to abuse today.

Most patients with single vessel coronary artery disease and chronic stable angina pectoris can be controlled by medical treatment and do not need PTCA. The primary indication for patients in this study to undergo PTCA was unstable angina pectoris. A recent study of patients with unstable angina pectoris, asso-

ciated ST-T wave changes of ischemia and a >80% stenotic coronary lesion noted a very high rate of progression to complete occlusion and myocardial infarction within a period of four months.<sup>7,8</sup> In our study group, 83% of the patients undergoing PTCA had unstable angina pectoris and 89% had a  $\geq 90\%$  stenotic coronary occlusion. Patients with Class II or III angina pectoris comprise only 17% of the patients in this study. The indication for coronary angioplasty in this small group of patients was disabling symptoms that prevented the patient from returning to their normal occupation.

The second question to be addressed is the cost benefit ratio to the patient. The cost benefit ratio can be assessed by looking at complication statistics as well as rate of restenosis of PTCA lesions. Obviously, the higher the rate of restenosis, the lower the PTCA cost effectiveness becomes because of repeated hospitalizations as well as the need for additional procedures. As far as complications, our emergency coronary artery bypass surgery rate of 4.4% and a mortality of 0.7% are well within the complication rates of several major reported studies.<sup>3,9</sup> Two of the three reported deaths were in patients that were at high risk for elective PTCA but were recommended for the procedure because of prohibitive underlying medical conditions for elective coronary bypass surgery. Thirty-six of 38 high-risk PTCA patients (94.7%) had successful PTCA procedures.

In the literature, rates of restenosis up to 25-30% are considered acceptable.<sup>2,10</sup> Our current clinical restenosis rate is 12.5%. Since a previous study documented a high rate of correlation between PTCA restenosis and clinical symptomatology, we did not routinely study asymptomatic patients with negative follow-up exercise tests.<sup>9</sup> Also, routine follow-up coronary angiography would increase patient costs and lower the cost benefit ratio of PTCA to the patient. Our 12.5% clinical restenosis rate includes patients with recurrent angina pectoris post-PTCA requiring medical treatment, recurrent angina pectoris post-PTCA requiring repeat PTCA or elective coronary bypass surgery, and patients with typical or atypical angina pectoris with recurring symptomatology and angiographic evidence of restenosis. Holmes *et al* reported that the rate of restenosis was greatest in the first six months post PTCA.<sup>2</sup> Since our clinical follow-up on these 407 patients is 11 months with a minimum of six months, we feel that the 12.5% clinical restenosis rate is most encouraging.

We attribute the low restenosis rate to conservative PTCA guidelines including dilatation of discrete lesions

and close measurement of final gradients. As reported in a previous study by Doctor Leimgruber *et al*, a final gradient of greater than 15 mmHg. is predictive of a higher rate of restenosis.<sup>10,11</sup> As noted from our data, the overall reduction in gradient has been from 60 mmHg. to 14 mmHg. Recent studies have reported that multiple dilatations in the same artery and dilatations in multiple vessels that are diffusely diseased result in a much higher restenosis rate.<sup>12,13</sup> We currently limit PTCA in patients with two and three vessel coronary disease to those patients with discrete lesions that are optimal for this procedure.

In the study by Reeder, the difference in cost of PTCA compared to bypass surgery was dependent primarily on the rate of restenosis.<sup>14</sup> That study revealed the difference between charges for coronary angioplasty and bypass surgery reflected a 15% overall difference in charge if one-third of the patients needed repeat PTCA as compared to a 35% difference in charges if only 10% of patients underwent repeat PTCA. With the invention of new guidewires that reach to the distal portion of almost any coronary artery, the trend and inclination is to dilate more and more lesions. However, the cost benefit ratio to the patient is not improved by the dilatation of multiple lesions in diffusely diseased arteries, but is improved by an approach to coronary artery disease using PTCA in patients who will have a low rate of complications and a low rate of restenosis.

Coronary angioplasty is a new technical procedure. The guidelines for performing PTCA have been recommended by Doctor Geoffrey Hartzler, a pioneer and leader in PTCA.<sup>15</sup> Doctor Hartzler recommends that anyone performing PTCA should have first performed over 1,000 routine cardiac catheterizations. Subsequently, the operator(s) first 50-100 PTCA cases should be strictly supervised and their first 200 cases should now have an initial success rate of greater than 85% with a less than 5% emergency coronary bypass surgery rate, and a mortality of less than 1%. He expects this high initial success rate because of the new PTCA equipment available since 1984. Our current success rate of greater than 95% with a 4.4% emergency coronary bypass surgery (3.2% since 1984), and a mortality of 0.7% are within the guidelines set by Doctor Hartzler.



**Summary Statements**

I. PTCA is an established mode of treatment for selected patients with coronary artery disease.

II. The primary indication for PTCA, especially in single vessel disease, should be unstable angina pectoris. 83.3% of our patients undergoing PTCA had unstable angina pectoris. 89% of the total population had an initial lesion  $\geq 90\%$  in diameter.

III. PTCA cost benefit ratio to the patient is dependent upon low complication rates and low rates of restenosis.

IV. Our current initial success rate of greater than 95% with less than 5% emergency coronary bypass surgery and a mortality of less than 1% is within current national guidelines.

V. Our current clinical restenosis rate of 12.5% reflects a conservative approach to PTCA in dilating discrete lesions but avoiding diffusely diseased coronary arteries. Angioplasty of multivessel disease is currently performed in selected cases with discrete lesions.

VI. PTCA is a technical procedure requiring much more complex technical procedural and manipulative skills than routine coronary angiography. The guidelines suggested by Doctor Hartzler should be recommended and followed by cardiologists and institutions where PTCA is performed.

**Acknowledgements**

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**References** 1. Kouchoukos N: Percutaneous transluminal coronary angioplasty: A surgeon's view *Circ* 72:1144-1146, 1986. 2. Holmes D: Restenosis after percutaneous transluminal coronary angioplasty (PTCA): A report from the PTCA Registry of the National Heart, Lung, and Blood Institute. *Am J Cardiol* 53:77c-81c, 1984. 3. Kent K: Long-term efficacy of percutaneous transluminal coronary angioplasty (PTCA): Report from the National Heart, Lung and Blood Institute PTCA Registry. *Am J Cardiol* 53:27c-31c, 1984. 4. Gruentzig A: Coronary transluminal angioplasty. *Circ* 55 (Suppl) 3:84, 1977. 5. Kennedy J: Clinical and angiographic predictors of operative mortality from the collaborative study in coronary artery surgery (CASS). *Circ* 63:793-804, 1981. 6. Kouchoukos N: Coronary bypass surgery: Analysis of Factors Affecting Hospital Mortality. *Circ* 62 (Suppl I):1-84, 1980. 7. Neill W: Acute coronary insufficiency - coronary occlusion after intermittent ischemia attack. *N Engl J Med* 302:1158-1162, 1980. 8. Moise A: Unstable angina and progression of coronary atherosclerosis. *N Engl J Med* 308:685-689, 1983. 9. Levine S: Coronary angioplasty: Clinical and angiographic follow-up. *Am J Cardiol* 55:673-675, 1985. 10. Leimgruber P: Restenosis after successful coronary angioplasty in patients with single-vessel disease. *Circ* 73:710-717, 1986. 11. Anderson H: Measurement of transtenotic pressure gradient during percutaneous transluminal coronary angioplasty. *Circ* 73:1223-1230, 1986. 12. Roubin G: Restenosis after multi-lesion and multivessel coronary angioplasty (PTCA). *J Am Coll Cardiol* 7:22A, 1986. 13. Vandormael M: Late angiographic outcome following successful multiple lesion PTCA. *J Am Coll Cardiol* 7:62A, 1986. 14. Reeder G: Is percutaneous coronary angioplasty less expensive than bypass surgery? *NEJM* 311:1157-1162, 1984. 15. Hartzler G: Percutaneous transluminal coronary angioplasty: View of a single relatively high frequency operator. *Am J Cardiol* 57:869-874, 1986.

# Doxycycline in Acute Bronchitis:

## A Randomized Double-Blind Trial

Eileen R. Scherl, MD, Sandra L. Riegler, MD and James K. Cooper, MD

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*Thirty-one patients with uncomplicated bronchitis characterized by cough and purulent sputum received doxycycline hyclate or placebo in a double-blind, randomized study. There was no difference between the groups in number of days of cough, sputum production, fever, days away from normal activity, or days of chest pain. A subgroup of six patients without coryza or sore throat benefited from doxycycline, and had fewer days of cough and sputum. However, the number of patients in this subgroup was too small for statistical significance. We believe that most cases of acute bronchitis can be treated conservatively with rest, fluids, and expectorants, and most patients will recover uneventfully without antibiotic therapy.*

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Infectious diseases comprise 73-78% of illnesses seen by primary care physicians, and upper and lower respiratory infections account for approximately 70% of these infectious diseases.<sup>1,2,3</sup> Many patients with acute respiratory illnesses visit the physician only after home remedies and over-the-counter preparations have failed. In general, patients want to receive prescription medications, especially antibiotics, when they have had persistent or unresponsive symptoms, and busy primary care physicians may want to save time and please their patients by giving antibiotics.<sup>4,5,6</sup>

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It is difficult to determine the etiology of acute bronchitis because viral cultures are not routinely available and bacterial cultures of sputum are frequently contaminated by mouth flora. Physicians use clinical judgment based on the history and physical examination to decide which patients need only cough suppressants and fluids in contrast to those who may benefit from a course of antibiotics. There is controversy in the literature about whether or not to use antibiotics in acute bronchitis.<sup>7,8,9,10,11</sup> Physicians thus have little scientific data on which to base their decisions.

In this study we attempted to determine if patients with acute, uncomplicated bronchitis benefit from a course of doxycycline.

### Methods

We studied consecutive patients in the outpatient medical clinic of University of Kentucky Medical Center over the age of 12 years with an acute illness (less than two weeks duration) characterized by cough and self-described purulent sputum. Excluded were persons with: chronic obstructive pulmonary disease, liver failure, renal failure, congestive heart failure, pregnancy, other known bacterial infection, use of antibiotics within one week of entry, tetracycline allergy, an influenza-like syndrome during a local epidemic at the time of the visit (defined as an acute illness with myalgia, fever, cough, headache), and patients whose chief complaint was coryza or sore throat who also had minimal sputum production. All patients studied had chief complaints of cough with purulent sputum.

Age, sex, smoking history, chest findings, presence of fever ( $>100.6$  F orally), symptoms of sore throat and/or coryza, chest pain, and shortness of breath at the time of initial examination were noted. Those with fevers or rales had roentgenograms of the chest. Patients with radiographic evidence of pneumonia were excluded from the study.



After obtaining informed consent, patients were randomized in a double-blind fashion to receive either placebo or doxycycline hyclate 100 mgm bid for one day followed by six days at 100 mgm daily. Patients were instructed to keep a preprinted symptom diary for two weeks to note: cough, sputum, feverishness, days missed from work or normal activity, chest pain, shortness of breath, capsule taken, and side effects. Patients were instructed not to use cough or "cold preparations." Aspirin and acetaminophen were allowed.

A phone call was made to each patient during therapy to encourage compliance. At a two-week follow-up visit, a pill count was made and the diary evaluated. The code was not broken until the entire study was completed.

Data were analyzed by analyses of covariance, using linear regressions as the analytic method. The outcome variables of interest were the dependent variables, and age, sex, smoking history, initial coryza symptoms, and drug were independent variables.<sup>12</sup>

### Results

Thirty-nine patients were entered in the study and 31 completed it. One patient who had coryza, sore chest without pleurodynia and chest rhonchi upon admission to the study (on placebo) developed significant pleuritic chest pain within one week. Chest roentgenograph showed a right lower lobe pneumonia. She was given a 10-day course of doxycycline and recovered very gradually. Hospitalization was not required. Another patient (on doxycycline) who had no coryza or sore throat, but who had headache and myalgia, developed an upper lobe pneumonia during therapy. Her husband and child were similarly ill with cough. She had recently completed one year of therapy with INH. One sputum was negative for tuberculosis by smear and culture. During her fourth week of cough she received a course of erythromycin and improved within two days. Hospitalization was not required. Chest roentgenograph was normal, without scarring, two years post treatment. One patient was eliminated from the study due to a culture-proven streptococcal pharyngitis. Two further patient diaries were either incomplete or uninterpretable and were thus eliminated from the study.

Of the remaining 31 patients, 16 received the drug and 15 received placebo. Characteristics of these two groups can be seen in Table 1.

TABLE 1 CHARACTERISTICS OF DRUG AND PLACEBO GROUPS		
Subjects	Placebo N = 15	Drug N = 16
Male	26%	37%
Age	31 ± 9 yrs	29 ± 10 yrs
Initial fever	6%	6%
Cigarette Smokers	20%	50%
Coryza/Sore Throat	67%	63%
Initial Shortness of Breath	47%	44%
Initial Chest Pain	40%	38%
Legend - There is no significant difference ( $p > .10$ ) by Fishers exact test (categorical variables) or t-test (age).		

TABLE 2 OUTCOMES, PLACEBO VS. DRUG, MEAN ± 95% CONFIDENCE LIMIT		
Outcomes	Placebo	Drug
Days of Cough	10.8 ± 1.2	9.4 ± 1.5
Days of Sputum	10.4 ± 1.4	8.5 ± 1.5
Days of Fever	1.9 ± 1.0	1.4 ± 1.1
Days Off	3.9 ± .8	3.4 ± 1.2
Days of Chest Pain	1.7 ± .9	1.6 ± 1.3

TABLE 3 COUGH AND SPUTUM IN PATIENTS WITHOUT CORYZA OR SORE THROAT				
	Doxycycline N = 6	Placebo N = 5	p	R <sup>2</sup>
Days of Cough	8.5	13.6	.0517	0.67
Days of Sputum	9.0	13.0	.0667	0.74

There was no statistically significant effect of drug on the course of bronchitis in the analysis of covariance using the general linear regression model.<sup>12</sup> The difference in the number of smokers in the two groups was controlled for by this method (see Table II). No significant adverse effects were noted in either group.

There was one subgroup which showed improvement on doxycycline. Patients who gave no history of either coryza or sore throat associated with the bronchitis had shorter illnesses with the drug (Table III). Patients with coryza or sore throat showed no difference in the course of their illness with drug as the dependent variable.

## Discussion

The most common type of acute bronchitis is associated with common cold viruses such as rhinovirus and coronavirus, and lower respiratory tract pathogens such as influenza virus, adenovirus, and *Mycoplasma pneumoniae*. The role of secondary bacterial invasion in the etiology of more severe types of bronchitis is not established.<sup>9</sup>

Stott & West<sup>10</sup> studied 212 patients with cough and purulent sputum randomized to receive either doxycycline or placebo. Seventy-six percent (158/207) had coryza upon entry into the study. They showed no effect of doxycycline on the course of acute bronchitis.

In our study, numbers were small but agreed with Stott & West's conclusion that doxycycline, a drug which is well-absorbed and with excellent penetration into the bronchial secretions and with efficacy against most bacterial pathogens of the respiratory tract and *Mycoplasma pneumoniae*, does not improve the course of acute, uncomplicated bronchitis. When we looked at a subset of 11 patients with no coryza or sore throat, the patients on doxycycline had fewer days of cough and sputum. This might be due to this subset of patients being more likely to have had bacterial or mycoplasma infection which could be successfully treated with doxycycline, whereas those with coryza or sore throat were more likely to have had viral illnesses. With the present data, no definitive conclusions are possible. Two patients developed pneumonia, one while on placebo and the other while on doxycycline. Both seemed to have had viral syndromes with significant coryza in one, and headache, myalgia, and similar illness in the family of the other. Both patients at some point received antibiotic therapy with minimal improvement and both patients recovered completely.

Antibiotics in this country are generally believed to be over prescribed and have potential deleterious effects.<sup>13-16</sup> We believe that most cases of acute, uncomplicated bronchitis in an ambulatory, otherwise well population are best treated without antibiotics.

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- References**
1. Hedgkins K: *Towards Earlier Diagnosis. A Family Doctor's Approach*. Baltimore: Williams & Wilkins, 1963 pp 32-62.
  2. Moffet HL: Common Infections in Ambulatory Patients. 1. Frequency of Infections: Effect on Health Care. *Ann Intern Med* 89: pp 743-745, 1978.
  3. Breese BB, Disney FA, Jalpey W: The Nature of a Small Pediatric Group Practice. Part I. *Pediatrics*. 38: pp 264-277, 1966.
  4. Monto AS, Ullman BM: Acute Respiratory Illness in an American Community. The Tecumseh Study. *JAMA* 227: pp 164-169, 1974.
  5. Kunin CM: Impact of Infections and Antibiotics Use on Medical Care. *Ann Intern Med* 89:716-717, 1978.
  6. McHenry, MC, Weinstein AJ: Antimicrobial Drugs and Infections in Ambulatory Patients. *The Medical Clinics of North America*; 67:1 pp 5-6, 1983.
  7. Baum, G: *Textbook of Pulmonary Diseases*. 3rd Ed. Boston: Little Brown and Co. 1983. pp 402-404.
  8. Robsen K: Acute Bronchitis. *Practitioner*; 181: pp 681-685, 1958.
  9. Gwaltney JM Jr: Acute Bronchitis. In Madel, GL, Douglas RG, Jr, Bennett JE. *Principles and Practice of Infectious Diseases*. New York: John Wiley and Sons Inc, 1979; pp 481-483.
  10. Stott, Nigel and West, Robert. Randomised Controlled Trial of Antibiotics in Patients with Cough and Purulent Sputum. *British Medical Journal*. 2. pp 556-559, Sept 4, 1979.
  11. Fedson DS, Rusthven J: Acute Lower Respiratory Disease. *Primary Care*; 6:13. pp 25-26, March 1979.
  12. Freund R, Littell RC: *SAS for Linear Models: A GUIDE to the ANOVA and GLM Procedures*. North Carolina: SAS Institute, Inc, 1981; pp 207-224.
  13. Howie J, Richardson I, Gill G, et al. Respiratory Illness and Antibiotics Use in General Practice. *J. Royal College of General Practitioners*; 21: pp 657-663, 1971.
  14. Soyka L, Robinson D, Lachant N, et al. The Misuse of Antibiotics for Treatment of Upper Respiratory Tract Infections in Children. *Pediatrics*; 55: pp 552-556, 1975.
  15. Kunin CM, Tupasi T, Craig WA. Use of Antibiotics. A Brief Exposition of the Problem and Some Tentative Solutions. *Ann Intern Med*; 79: pp 555-560, 1973.



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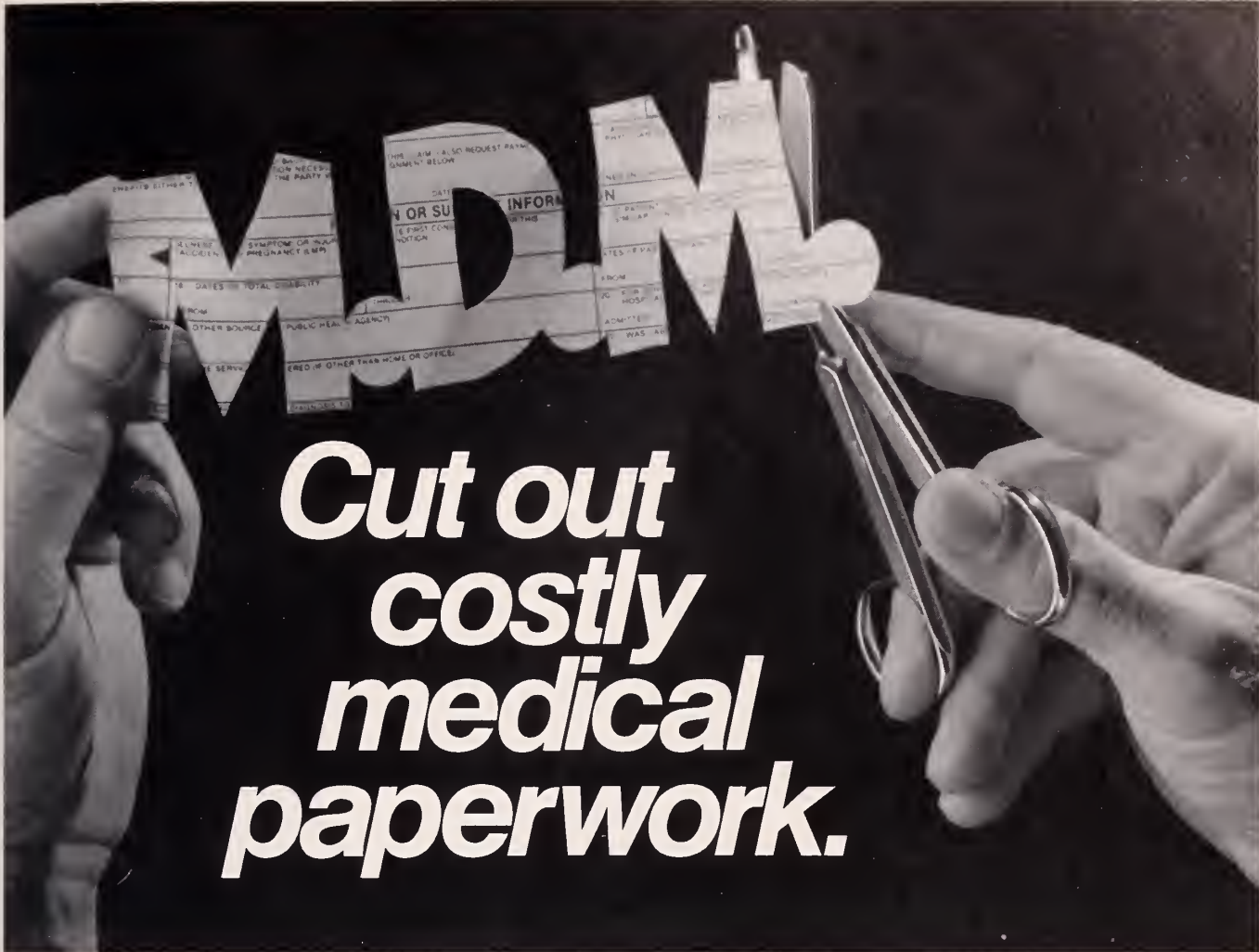
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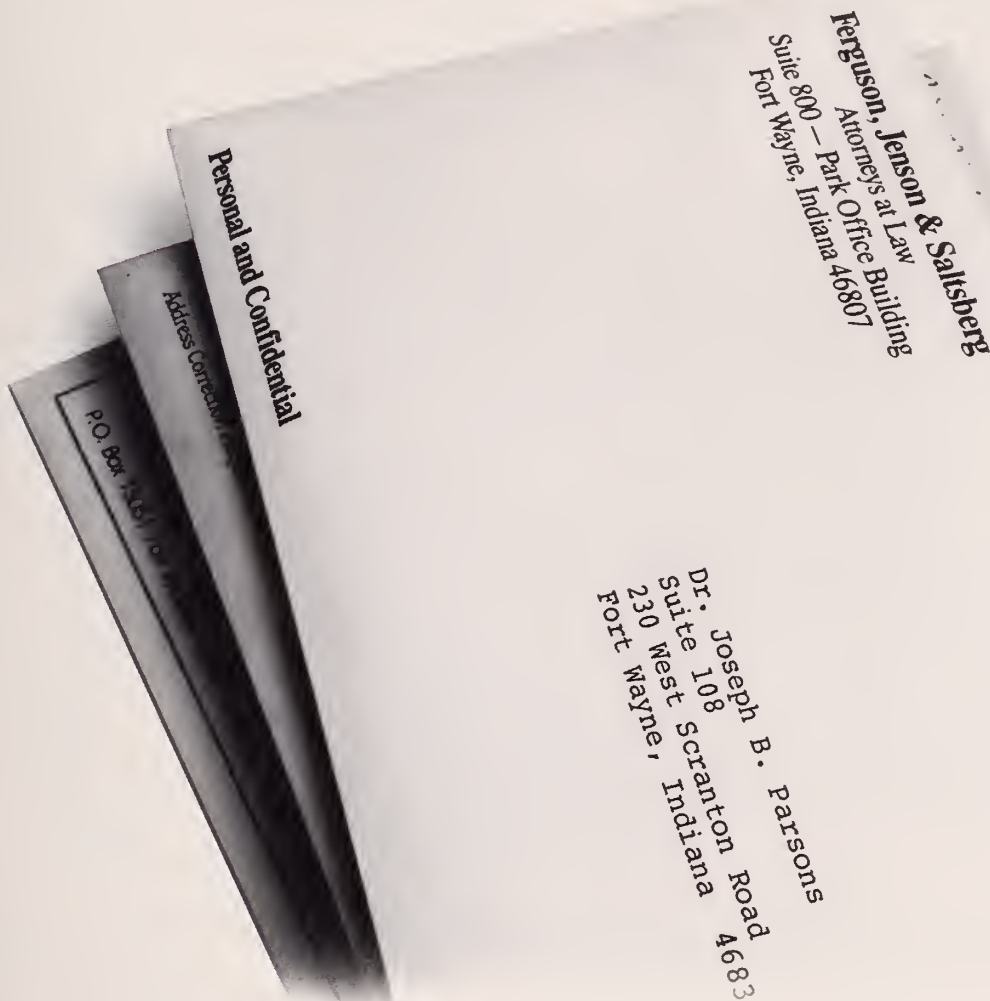
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### CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

### WARNINGS

- Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
- Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
- Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
- Acute Hepatic Injury.** In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)

### PRECAUTIONS

**General.** CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic

function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

**Drug Interaction.** Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in *in vitro* bacterial tests. No intrinsic effect on fertility was observed in rats.

**Pregnancy.** Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration at doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryonic and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.

**Pediatric Use.** Safety and effectiveness in children have not been established.

### ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably asso-

ciated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency at presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.
Nervous System:	Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.
Gastrointestinal:	Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations at alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.
Dermatologic:	Petechiae, pruritus, photosensitivity, urticaria.
Other:	Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarthicular pain, polyuria, sexual difficulties.

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**References:** 1. Pepine CJ, Feldman RL, Hill JA, et al: Clinical outcome after treatment at rest angina with calcium blockers: Comparative experience during the initial year of therapy with diltiazem, nifedipine, and verapamil. *Am Heart J* 1983; 106(6):1341-1347. 2. Shapiro W: Calcium channel blockers: Actions on the heart and uses in ischemic heart disease. *Consultant* 1984;24(Dec):150-159. 3. Johnston DL, Lesoway R, Humen DP, et al: Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: A placebo-controlled, double-blind, randomized, crossover study. *Am J Cardiol* 1985;55:680-687. 4. Cahn PF, Braunwald E: Chronic ischemic heart disease, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. 5. Schroeder JS: Calcium and beta blockers in ischemic heart disease: When to use which. *Mod Med* 1982;50(Sept):94-116.

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## Toward A National Health Policy

I'll spare you the details, but I was just in the hospital for surgical treatment of a condition that was more nuisance than dangerous, though it was eventually going to become urgent and perhaps risky. It was not painful (though the Foley seemed to be covered with ashes, sand and salt), the surgeon was superb, the nurses marvelous, the hospital convenient, the costs astonishing. Happily, the costs were manageable, courtesy of the Big Blues plus Connecticut General plus my own contributions. The church-associated hospital probably did not profit unduly (though a thousand dollars for distilled water for bladder irrigation seems a bit much), and they went out of their way to make my stay comfortable and successful. I am fortunate and grateful.

Yet, I am reminded of those less fortunate in coverage and resources. Something strange and frightening is happening in medical care. For a variety of reasons our ability to pay is declining even as, for several reasons, the costs go up. But, this is not a new observation.

The first reason costs go up is that we *can* do more for the ailing and it is therefore assumed that we *must* do more, must *always* do more. The other reasons seem to be all associated with profit and not only profit for medical care people, but also for a witches' brew of hangers-on, for sub-professionals, politicians, bureaucrats, clerks, stockholders and lawyers. The public can even now look back nostalgically at the resentment they once felt when only doctors seemed to profit from medical care, when health-care costs were an infinitely smaller proportion of national income. We'd known that, too.

Most physicians are not competent in things economic, particularly medical economics. I, especially, am unsophisticated in such areas, but it is plain that the cost of medical care is moving beyond our society's means. This insight, neither original nor erudite, is just Medical Folk Wisdom, hesitantly, uneasily, reluctantly obtained. The hesitancy relates to my own role in it; I have made a living, comfortable, but unspectacular, from the system that now threatens to chew us up, the same system that confounds physicians, delights profiteers, infuriates patients, inflates politicians, tempts lawyers, all this in the name of things like Rights and Freedom and Private Enterprise. As usual, when profit and position and power are issues our thinking gets fuzzy, our motives become mixed. Add some immiscible Ethics and it becomes murky indeed. This has been said before and better.

We get into a quandary when we try to weigh the value of health and of life. If one of my new granddaughters needed a new liver in order to live, then it would surely be our clan's inclination to somehow come up with the prodigious amounts of money required, while we awkwardly tried to pretend that we were not devoutly wishing for the early brain death of someone else's grandchild so that we might have that liver. Perhaps we shouldn't do any of this. Maybe it just costs too much in economic and human terms. Life is precious but it is not priceless. We don't hear that a lot.

I'd feel better about the insurance people I tangle with over the costs of appropriate treatment if I believed their motivation was the proper care of

the patient. Instead, we find that these functionaries, often innocent of medical judgement, sitting at a terminal a thousand miles away, will be very pleased with themselves if they can intimidate me into giving sub-optimal care, thereby increasing their master's profit. Their satisfaction is based not on some Great National Purpose such as bringing the cost of medical care under control. No, here, at least, their motives are not mixed, whatever lip-service they pay to quality of care in full-page newspaper advertisements. Profit is paramount. Ethics, of course, has already wavered and wilted, matched against money. That's not a new thought, either.

Physicians are not without blame. It is exceedingly difficult in this climate for us to keep these issues in perspective. Some fees are exorbitant; too many of us have been swept up into the view that advantage and profit must be siezed before something even more restrictive presents. This is wrong, but we'd already known that.

Back to Folk Wisdom—it is now plain that We, the People are trying to take more out of our system, our economy—our country, really—than we've been willing to put back. We can do so only briefly. Our national and personal and medical productivity—needs alignment with reality; we are not now so aligned. Though it will certainly survive in some form, one ventures that the New Medicine will be marked by diminishing public confidence and quality and even profits, but marked by still rising costs. This is hardly a revolutionary observation.

There is little agitation for a national consensus on health care issues. Those who would influence such deliberations have many conflicting



agendas and motivations, many of which will not withstand moral and practical scrutiny. Physicians, those who know illness best, cannot alone set a National Health Policy. Those who know only bottom lines can't either, but they're doing it now and in that direction lies chaos.

You've heard it all before. Desperation makes us keep saying these things again. Medicine has been on the defensive for a generation but it isn't helping us or our patients.

I wish our regional and national societies, under AMA leadership, could sponsor a genuine debate designed to

develop a National Health Policy. It's risky, but we need to think new things. A national election looms and most of us are tired of being on the defensive.

**David L. Stewart, M.D.**

## MANUSCRIPT INFORMATION

Manuscripts will be accepted for consideration with the understanding that they are original and are contributed solely to The Journal. They should be submitted in duplicate, typed with double spacing, and should usually not exceed 2,000 words in length. The transmittal letter should designate one author as correspondent and include his complete address and telephone number.

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should be able to stand alone and not merely duplicate the conclusions.

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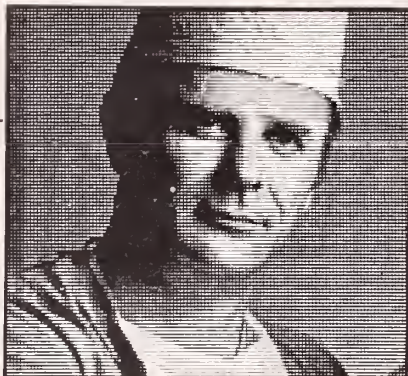
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## A Study of Women's Awareness and Use of Mammograms

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*About one woman out of ten in the United States will develop breast cancer during her lifetime. Until the disease can be prevented, the best way for women to protect themselves is through early detection and prompt treatment. As part of a three-part plan for the early detection of breast cancer, (including clinical breast examination and breast self-exam), the American Cancer Society recommends that a symptomatic woman receive a baseline mammogram between the ages of 35 and 39, that she have a mammogram every one to two years between the ages of 40 and 49, depending on her risk, and that she have a mammogram annually thereafter.*

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*Sponsored by American Cancer Society  
Interviewing by the Gallup Organization  
Analyzed by Lieberman Research Inc. February, 1987*

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This research was designed to determine women's current awareness and use of mammograms and to provide a benchmark against which future changes in women's awareness and use of mammograms can be assessed.

The following were the specific information objectives of this investigation:

1. What is the level of awareness of mammograms among women in the target population, *ie.* women 40 years old and older?
2. What percentage of women in the target population have ever had a mammogram, what percentage have had a mammogram in the past two years, and what percentage expect to have a mammogram in the next two years?
3. What percentage of women in the target population have had mammograms as part of a general health checkup and what percentage have had mammograms due to symptoms?
4. What is the extent to which doctors have recommended mammograms to women in the target population?
5. What are the sources of resistance to having mammograms among women in the target population?

The survey was based on personal interviews conducted with a nationally representative sample of 1,156 women, 40 years of age and older. The interviewing for the study was conducted between October 21 and December 7, 1986.

The American Cancer Society plans to increase its efforts to educate the public and professionals about the importance of mammograms as an early detection tool for breast cancer. By tracking changes in women's awareness and use of mammograms over time, we can determine the extent to which the ACS is succeeding in this educational program.



## MAMMOGRAMS

### Results

1. Of the 40-and-over women surveyed, 83% have heard of mammograms and 43% report that they have had a mammogram.

Twenty-nine percent of those surveyed report that they have had a mammogram in the past two years and a similar number (31%) indicate that they expect to have a mammogram in the next two years.

The 29% who have had a mammogram in the past two years represent about two-thirds of those who have had a mammogram. This suggests that having mammograms is a relatively recent phenomenon for many women. (Table 1)

2. Having a mammogram is more common in the upper socioeconomic population.

Higher income and better educated women are more *familiar* with mammograms than lower income and less educated women.

Similarly, higher income and better educated women are more apt to have *had* mammograms than lower income and less educated women. (Table 1)

3. A majority of the women who have had a mammogram in the past two years also expect to have one in the next two years.

At the other end, most of those who have *not* had a mammogram in the past two years also do *not* expect to have one in the next two years.

This suggests that, while there is a small group of

	Heard Of Mammo- gram	Have Had Mammo- gram	Had Mammo- gram In Past 2 Years	Plan To Have Mammo- gram In Next 2 Years
<b>Total</b>	<b>83%</b>	<b>43%</b>	<b>29%</b>	<b>31%</b>
<b>Age</b>				
40-49 years	87	44	33	37
50 years and over	81	42	27	28
<b>Household Income</b>				
\$30,000 and over	90	52	38	47
\$20,000 - \$29,999	87	53	41	39
Under \$20,000	77	36	21	21
<b>Education</b>				
College	90	47	32	36
Completed high school	87	43	31	37
Some high school or less	73	39	23	18

TABLE 2  
RELATIONSHIP BETWEEN PAST EXPERIENCE WITH MAMMOGRAMS AND FUTURE EXPECTATIONS OF HAVING MAMMOGRAMS

	Had Mammo- gram In Past 2 Years	Did Not Have Mammo- gram In Past 2 Years
Expect to have mammogram in next 2 years	66%	12%
Do not expect to have mammogram in next 2 years	34	88

women who have regular mammograms, there is an even larger group of women who are not involved with mammograms at all. (Table 2)

4. Of the women who have had mammograms, about two-thirds had mammograms as part of general health checkups and about one-third had mammograms due to symptoms.

The 43% who have had a mammogram include 30% who had them as part of a checkup and 16% who had them due to a symptom. (Table 3)

5. Having a mammogram as part of a general health checkup is more common among higher income and better educated women than among lower income and less educated women.

Having a mammogram due to a symptom is equally common across income and education segments. (Table 3)

6. The most common reason, by far, why women say they do not plan to have a mammogram is that they do not see the need for it. Seventy-seven percent cite "no need" as the reason.

Other deterrents such as cost, time, fear, etc., are mentioned by 5% or fewer women. (Table 4)

7. About one out of three women surveyed (35%) report that a doctor recommended that they have a mammogram.

The remainder (65%) indicate that a doctor never recommended a mammogram to them. (Table 5)

8. Doctors' recommendations play an important part in determining whether women have mammograms.

Ninety-four percent of those whose doctors recommended mammograms have had a mammogram in the past two years.

On the other hand, only 36% of those whose doctors did *not* recommend mammograms have had a mammogram in the past two years. (Table 6)

## MAMMOGRAMS

TABLE 3

WHETHER HAD MAMMOGRAMS AS PART OF HEALTH CHECKUPS OR DUE TO SYMPTOMS

	Have Had Mammo- gram	Had Mammo- gram As Part Of Health Checkup	Had Mammo- gram Due To Symptoms
<b>Total</b>	<b>43%</b>	<b>30%</b>	<b>16%</b>
<b>Age</b>			
40-49 years	44	32	16
50 years and over	42	30	15
<b>Household Income</b>			
\$30,000 and over	52	40	18
\$20,000 - \$29,999	53	42	17
Under \$20,000	36	23	15
<b>Education</b>			
College	47	34	17
Completed high school	43	32	17
Some high school or less	39	24	13

TABLE 4

REASONS FOR NOT PLANNING TO HAVE MAMMOGRAM  
(Among Those Who Do Not Plan To Have Mammogram)

	Total
Do not need it	77%
Cost/too expensive	5
Test is hazardous	3
Fear of breast cancer	3
Lack of access to doctor/hospital	2
Lack of time	*
Other reasons	7
No particular reason	8

\*Less than 0.5 percent

TABLE 5

WHETHER DOCTOR RECOMMENDED  
MAMMOGRAMS

	Doctor Has Recommended Mammogram
<b>Total</b>	<b>35%</b>
<b>Age</b>	
40-49 years	39
50 years and over	34
<b>Household Income</b>	
\$30,000 and over	46
\$20,000 - \$29,999	45
Under \$20,000	28
<b>Education</b>	
College	41
Completed high school	36
Some high school or less	30

TABLE 6

RELATIONSHIP BETWEEN DOCTORS' RECOMMENDATIONS AND EXPERIENCE WITH MAMMOGRAMS

	Doctor Recom- mended Mammogram	Doctor Never Recom- mended Mammogram
<b>Past Experience With Mammograms</b>		
Have had mammogram	94%	36%
Never had mammogram	6	64
<b>Future Expectations About Mammograms</b>		
Expect to have mammo- gram in next 2 years	66%	12%
Do not expect to have mammogram in next 2 years	34	88

### Conclusions

The findings indicate that, while a majority of women in the 40-and-over age bracket (83%) have heard of mammograms, only a minority (43%) have had a mammogram, and an even smaller minority (29%) expect to have one in the next two years.

More needs to be done to build women's awareness of the importance of having a mammogram since most women apparently do not view mammograms as part of a complete program of early detection of breast cancer (along with clinical breast examinations and breast self-examination.)

In addition, more needs to be done to persuade doctors to recommend mammograms since women are much more likely to have mammograms when doctors make such recommendations.



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**Pamela H. Potter**

## We Caught the Winning Spirit

**D**uring 1986-87, the Auxiliary was challenged to "Catch the Winning Spirit." Under the capable leadership of AKMA's immediate past President, Phyllis Cronin, the state auxiliary board and county auxiliaries did just that. Our efforts were rewarded at the AMA Auxiliary Annual Meeting held June 21-24 in Chicago. At that meeting, Mrs. Cronin proudly accepted six awards presented to AKMA and our county auxiliaries in the areas of AMA-ERF and membership.

### AMA-ERF

Last year the AMA Auxiliary contributed almost \$2,000,000.00 to the American Medical Association Education and Research Foundation. The role that Kentucky played in this major fundraising effort was well recognized.

THE AUXILIARY TO THE BOYD COUNTY MEDICAL SOCIETY WAS RECOGNIZED AS THE COUNTY WITH THE SECOND HIGHEST PER CAPITA CONTRIBUTION IN THE NATION (\$208.64). AMA-ERF has been top priority for the Boyd County Auxiliary for many years. Since 1984,

Boyd County has been recognized for having the highest per capita contribution in the nation two times and the second highest per capita two times. AKMA appreciates the efforts of the entire Boyd County Auxiliary and extends a special thank you to Mrs. Lamar Meigs, Boyd County AMA-ERF Chairman, and to her hard working committee.

AKMA WAS RECOGNIZED AS THE STATE AUXILIARY WITH THE THIRD HIGHEST PER CAPITA CONTRIBUTION IN THE NATION. The enthusiastic leadership of state AMA-ERF chairman, Mrs. Jack Blackstone, the hard work of our county AMA-ERF chairmen, and the generosity of the medical community throughout Kentucky combined to earn this very special recognition for AKMA. Using Holiday Sharing Cards, auctions, raffles, and other fundraising activities, Kentucky auxiliaries raised almost \$50,000.00 for AMA-ERF last year, an increase of approximately \$5,000.00 over the previous year. Our per capita contribution of \$38.72 was the third highest in the nation.

BOTH THE BOYD AND JEFFERSON COUNTY AUXILIARIES WERE RECOGNIZED FOR HAVING AMA-ERF CONTRIBUTIONS IN EXCESS OF \$10,000.00. Of the approximately 900 county auxiliaries across the nation, only 17 were recognized for contributing \$10,000.00 or more to AMA-ERF during 1986-87. AKMA is very proud that the auxiliaries to the Boyd and Jefferson County Medical Societies both received this special recognition.

AKMA was particularly honored when the immediate past President of the Jefferson County Auxiliary, Mrs. Charles Roser, was invited to Chicago as the special guest of the AMA Auxiliary to discuss her county's successful Holiday Sharing Card project during an AMA-ERF program preview.

### Membership

In 1986-87, AKMA membership chairman, Mrs. Larry Franks, emphasized that "Members are Winners." When membership awards were presented, two of our county





Phyllis Cronin, (L) AKMA past President, accepts six awards for AMA-ERF and Membership.

auxiliaries were recognized for their winning efforts.

THE BOYLE COUNTY AUXILIARY WAS RECOGNIZED AS THE COUNTY AUXILIARY WITH THE HIGHEST PERCENTAGE INCREASE IN AMA AUXILIARY MEMBERSHIP IN THE NATION. Each year the AMA Auxiliary presents an award for the county auxiliary having the highest percentage increase in AMAA membership in the nation. This year the award went to Boyle County.

THE PENNYRILE AUXILIARY RECEIVED RECOGNITION FOR NEW AMA AUXILIARY MEMBERSHIP. Although the Pennyrile Auxiliary has been in existence for many years, it lost its national designation as a local auxiliary in 1985-86 when its AMAA membership fell to one. Pennyrile came back in 1986-87 with a strong recruitment effort. The 15 members of the Pennyrile Auxiliary received an award for their work in reorganizing their local auxiliary.

AKMA is extremely proud of the awards presented to these county auxiliaries. We are equally proud of the numerous other accomplishments of AKMA and our county auxiliaries. When our achievements of the past year are reviewed, it's obvious —

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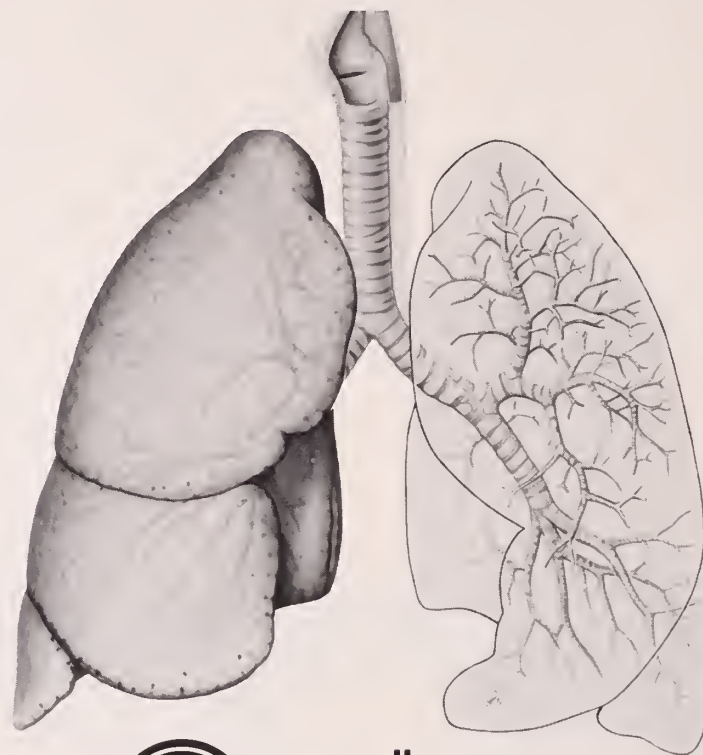
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**Ceclor<sup>®</sup>**  
cefaclor

**250-mg Pulvules<sup>®</sup> t.i.d.**

**offers effectiveness against  
the major causes of bacterial bronchitis**

*Haemophilus influenzae, Streptococcus pneumoniae*  
(ampicillin-susceptible and ampicillin-resistant)

**Note:** Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

## **Ceclor<sup>®</sup>** (cefaclor)

**Summary.** Consult the package literature for prescribing information.

**Indications:** Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A  $\beta$ -hemolytic streptococci).

**Contraindication:**  
Known allergy to cephalosporins.

### **Warnings:**

CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

### **Precautions:**

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

### **Adverse Reactions:** (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness,

insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

### **Abnormalities in laboratory results of uncertain etiology**

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistest<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (glucose enzymatic test strip, Lilly).

[072866R]  
PA 8794 AMP

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

**Eli Lilly Industries, Inc.**  
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## RENAL CALCULI

We're proud to announce the introduction of Extracorporeal Shock Wave Lithotripsy as a new feature of our kidney stone treatment program. This new device makes it possible to pulverize and eliminate kidney stones without invasive surgery. Now you have the opportunity to participate in this state-of-the-art procedure at CAMC's High Tech Center here in Charleston, West Virginia.

The Lithotripter uses shock waves to bombard kidney stones into sand-like particles inside the body. The residue is then easily passed. Although the theory behind Lithotripsy is simple, the process is precise. The stone is pinpointed inside the body with fluoroscopy and shock wave firing is synchronized with the patient's heartbeat by electrocardiogram. Usually, the entire process takes about an hour.

As you can imagine, Lithotripsy offers many benefits to kidney stone patients. The process is less painful, entails fewer side effects, and recuperation is quicker than with conventional surgery. It's even less expensive than surgery.

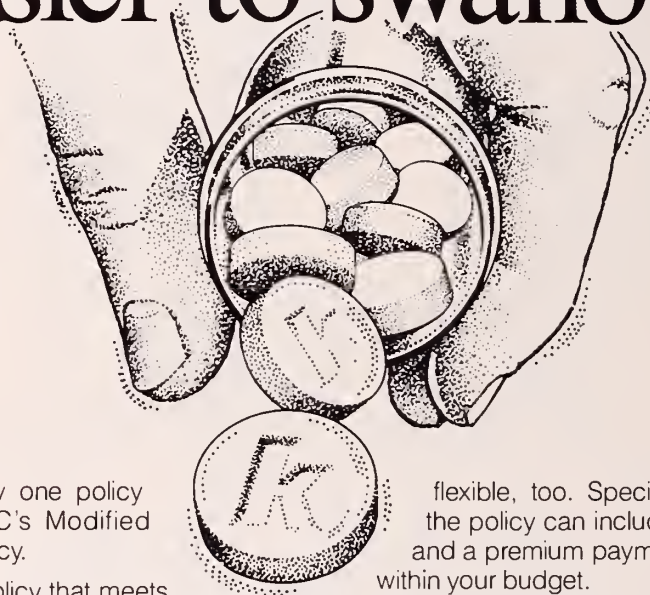
We're encouraging all area urologists to apply for privileges in Extracorporeal Shock Wave Lithotripsy. We invite you to visit CAMC and see the lithotripter in action. Come and learn about this revolutionary therapy. We will happily provide you with a brochure for your use as well as brochures for your patients.

For your brochures or other information about Lithotripsy and our kidney stone treatment program, call CAMC: in West Virginia at 1-800-654-0159; from out of state, call 304-340-7315.

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## BRIEF SUMMARY

### CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

### PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

**Drug Interactions:** Animal studies have shown that the simultaneous administration of CARAFATE with tetracycline, phenytoin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. The clinical significance of these animal studies is yet to be defined.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** No evidence of drug-related tumorigenicity was found in chronic oral toxicity studies of 24 months' duration conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies have not been conducted.

**Pregnancy:** Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

**Pediatric Use:** Safety and effectiveness in children have not been established.

### ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients, adverse effects were reported in 121 (4.7%). Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

### DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

### HOW SUPPLIED

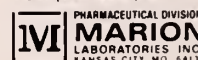
CARAFATE (sucralfate) 1-gm pink tablets are supplied in bottles of 100 and in Unit Dose Identification Paks of 100. The tablets are embossed with MARION/1712.

Issued 3/84

### References:

1. Korman MG, Shaw RG, Hansky J, et al: *Gastroenterology* 80:1451-1453, 1981.
2. Korman MG, Hansky J, Merrett AC, et al: *Dig Dis Sci* 27:712-715, 1982.
3. Brandstaetter G, Kratochvil P: *Am J Med* 79(suppl 2C):36-38, 1985.
4. Marks IN, Wright JP, Gilinsky NH, et al: *J Clin Gastroenterol* 8:419-423, 1986.
5. Lam SK, Hui WM, Lau WY, et al: *Gastroenterology* 92:1193-1201, 1987.

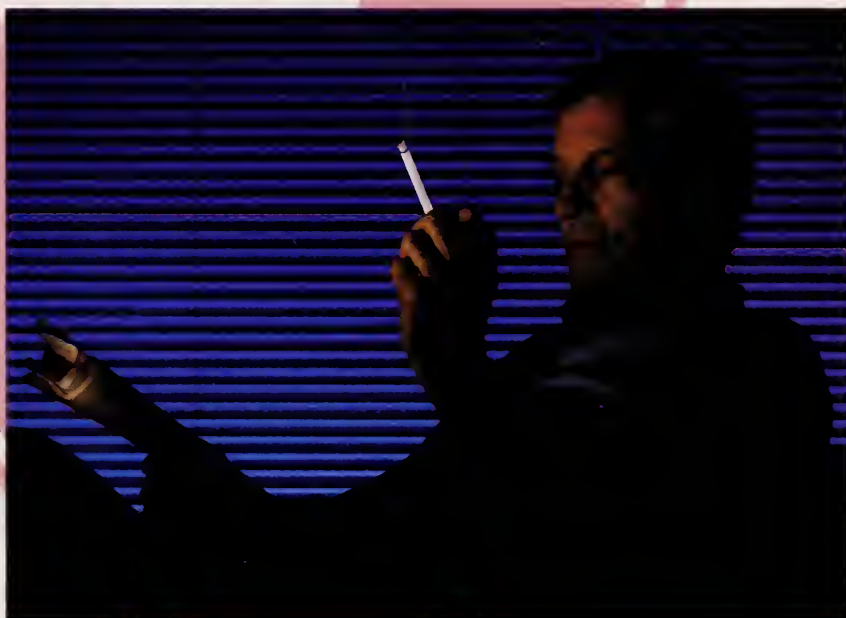
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# Ulcer therapy that won't yield, even to smoking

YIELD



What do you do for duodenal ulcer patients who should stop smoking, but won't? Both cimetidine<sup>1</sup> and ranitidine<sup>2</sup> have been shown less effective in smokers than nonsmokers.

Choose CARAFATE® (sucralfate/Marion). Two recent studies show Carafate to be as effective in smokers as nonsmokers.<sup>3,4</sup> A difference further illustrated in a 283-patient study comparing sucralfate to cimetidine<sup>5</sup>:

Ulcer healing rates:  
(at four weeks of therapy)<sup>5</sup>

Sucralfate:

All patients 79.4%

Smokers 81.6%\*

Cimetidine:

All patients 76.3%

Smokers 62.5%

Carafate has a unique, nonsystemic mode of action that enhances the body's own ulcer healing ability and protects the damaged mucosa from further injury.

When your ulcer patient is a smoker, prescribe the ulcer medication that won't go up in smoke: safe, nonsystemic Carafate.

Nothing works like

**CARAFATE**®  
sucralfate/Marion

Please see adjoining page for references and brief summary of prescribing information.

\*Significantly greater than cimetidine smoker group ( $P < .05$ ).



There's never been a better time for her...





and PREMARIN<sup>®</sup>

**Proven benefits beyond relief  
of vasomotor symptoms**

**No other estrogen proven  
effective for osteoporosis**

Only conjugated estrogens tablets have established efficacy in both osteoporosis<sup>1</sup> and vasomotor symptoms\* at 0.625 mg/day. No other estrogen, oral or transdermal, has established clinical evidence or minimum effective dose in both indications.

**No estrogen proven safer**

PREMARIN is the most extensively tested estrogen, with an unsurpassed record of long-term safety.

And clinical evidence shows a significantly reduced risk of endometrial hyperplasia when cycled with a progestin.<sup>2</sup>

**PREMARIN<sup>®</sup>**  
(conjugated estrogens tablets)

**Most trusted for more reasons**

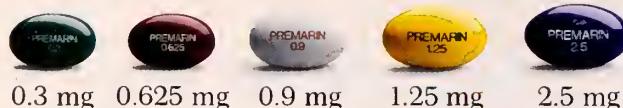
\*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

Please see following page for brief summary  
of prescribing information.



For moderate-to-severe  
vasomotor symptoms and  
for osteoporosis

## PREMARIN® (conjugated estrogens tablets)



The appearance of these tablets is a trademark of Ayerst Laboratories.

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)

**PREMARIN® Brand of conjugated estrogens tablets, USP**

**PREMARIN® Brand of conjugated estrogens Vaginal Cream, in a nonliquefying base**

1 ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA. Three independent, case-controlled studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case-controlled studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semi-annual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equi-estrogenic doses.

2 ESTROGENS SHOULD NOT BE USED DURING PREGNANCY. The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a nonsteroidal estrogen, have an increased risk of developing, in later life, a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb-reduction defects. One case-controlled study estimated a 4.7-fold increased risk of limb-reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb-reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well-controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

**DESCRIPTION:** PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mare urine. It contains estrone, equilin, and 17 $\alpha$ -dihydroequilin, together with smaller amounts of 17 $\alpha$ -estradiol, equilin, and 17 $\alpha$ -dihydroequilin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

**INDICATIONS AND USAGE:** PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe vasomotor symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) Osteoporosis (abnormally low bone mass). Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae.

PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

**Concomitant Progestin Use:** The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens (SEE PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

**CONTRAINDICATIONS:** Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (see Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

**WARNINGS:** Estrogens have been reported to increase the risk of endometrial carcinoma (see Boxed Warning). However, a recent large, case-controlled study indicated no increase in risk of breast cancer in postmenopausal women. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement, it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism, and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

For atrophic vaginitis

## PREMARIN® (conjugated estrogens)

Vaginal  
Cream

0.625 mg/g



Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

**PRECAUTIONS:** Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention, such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Pre-existing uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not yet complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen.

- Increased sulfobromophthalein retention.
- Increased prothrombin and factors VII, VIII, IX, and X, decreased antithrombin 3, increased norepinephrine-induced platelet aggregability.
- Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI,  $T_4$  by column, or  $T_4$  by radioimmunoassay. Free  $T_3$  resin uptake is decreased, reflecting the elevated TBG; free  $T_4$  concentration is unaltered.
- Impaired glucose tolerance.
- Decreased pregnandiol excretion.
- Reduced response to metyrapone test.
- Reduced serum folate concentration.
- Increased serum triglyceride and phospholipid concentration.

As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

Long-term, continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. However, in a recent, large case-controlled study of postmenopausal women there was no increase in risk of breast cancer with use of conjugated estrogens.

**ADVERSE REACTIONS:** The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow, dysmenorrhea, premenstrual-like syndrome, amenorrhea during and after treatment, increase in size of uterine fibromyoma, vaginal candidiasis, change in cervical erosion and in degree of cervical secretion, cystitis-like syndrome, tenderness, enlargement, swelling (of breasts), nausea, vomiting, abdominal cramps, bloating, cholestatic jaundice, chloasma or melasma which may persist when drug is discontinued, erythema multiforme, erythema nodosum, hemorrhagic eruption, loss of scalp hair, hirsutism, sleepiness of corneal curvature, intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea, increase or decrease in weight, reduced carbohydrate tolerance, aggravation of porphyria, edema, changes in libido.

**ACUTE OVERDOSAGE:** May cause nausea, and withdrawal bleeding may occur in females.

### DOSE AND ADMINISTRATION:

**PREMARIN® Brand of conjugated estrogens tablets, USP**

1. *Given cyclically for short-term use only.* For treatment of moderate-to-severe vasomotor symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 mg to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically.* Osteoporosis. Female castration. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off). Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control.

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

**PREMARIN® Brand of conjugated estrogens Vaginal Cream**

*Given cyclically for short-term use only.* For treatment of atrophic vaginitis or kraurosis vulvae. The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three- to six-month intervals.

Usual dosage range: 2 g to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

### References:

1. Lindsay R, Hart OM, Clark OM. The minimum effective dose of estrogen for prevention of postmenopausal bone loss. *Obstet Gynecol* 1984;63:759-763. 2. Studd JWW, Thom MH, Paterson MEL, et al. The prevention and treatment of endometrial pathology in postmenopausal women receiving exogenous estrogens. In: Pasetto N, Paoletti R, Ambrus JL (eds). *The Menopause and Postmenopause*. Lancaster, England, MTP Press Ltd, 1980, chap 13.

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Lexington  
James Evans Carter, M.D.  
Tompkinsville  
Ralph Louard Cash, M.D., Princeton  
Charles D. Clark, M.D., Murray  
Robert Charles Clear, M.D., Bellevue  
Charles Glyndon Click, M.D., Stanford  
Norman Katz Cohen, M.D., Louisville  
John Edward Cotthoff, M.D.  
Hopkinsville  
Max Aldon Crocker, M.D., Lexington  
Robert John Dempsey, M.D.  
Lexington  
Neil Dionysius De Soyza, M.D.  
Henderson  
Victor F. Duvall, M.D., Clarkson  
Charles Grant Dye, M.D., Hopkinsville  
Daymon Walter Evans, M.D.,  
Louisville

Sidney Eugene Farmer, M.D.  
Brownsville  
James Christian Jensen, M.D.  
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Arthur H. Keeney, M.D., Louisville  
Clifford Franklin Kerby, M.D., Berea  
Robert Collin Kratz, M.D., Newport  
Walter Joseph Kuebler, M.D., Bowling  
Green  
Ullin W. Leavell, M.D., Lexington  
Robert Dery Lindberg, M.D., Louisville  
Robert Theodore Longshore, M.D.  
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Michael F. Milan, M.D., Lexington  
Richard Stayton Miles, M.D.  
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William Leslie Miller, M.D.  
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Harold Stone Moberly, M.D.  
Winchester  
Mortimer H. Moseley, M.D., Eddyville  
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Donald Robert Freund, M.D., Mayfield  
Oskar Peter Friedlieb, M.D., Russell  
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Larry Paul Griffin, M.D., Louisville  
Harold Dale Haller, M.D., Louisville  
Kenneth Robert Hauswald, M.D.  
Ashland  
John Hobart Hines, M.D.  
Shepherdsville  
Robert Allen Jacob, M.D. Louisville  
William Norris Jennings, M.D.  
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Charles E. Rankin, M.D., Lexington  
Jeffrey Bruce Rubinstein, M.D.  
Newport  
William T. Ramage, M.D., Louisville  
Nat Harold Sandler, M.D., Lexington  
Paul David Schneider, M.D., Louisville  
Harold J. Schupbach, M.D.  
Owensboro  
Ellsworth Carl Seeley, M.D., Lexington  
John Woodrow Simmons, M.D.  
Monticello  
Ranjit Sinha, M.D., Morehead  
Clifton Smith, M.D., Lexington  
Kenneth William Smith, M.D.  
Middlesboro  
Richard Francis Smith, M.D.,  
Lexington  
Robert R. Starr, M.D., Glasgow  
Robert Winston Stigall, M.D., Danville  
James H. Stuteville, M.D., Sonora  
Nancy Jewell Swikert, M.D., Florence  
Jonathan N. Terhune, M.D.  
Hopkinsville  
Joan E. Thomas, M.D., Louisville  
Robert Jerome Thomas, M.D.,  
Ashland  
Sam H. Traughber, M.D., Hopkinsville  
Tse Min Tsai, M.D., Louisville  
Erlindo General Valera, M.D., Pikeville  
Remedios Mintu Valera, M.D.,  
Pikeville  
William McClure Waller, M.D., Walton  
Richard J. Wever, M.D., Paris  
Max Eugene Wheeler, M.D., Ashland  
David White, M.D., Prestonsburg  
Larry J. Wilson, M.D., Louisville  
Mary Lucille Wiss, M.D., Pikeville  
Mary A. Browne Woodring, M.D.  
Middlesboro  
William Eugene Yancey, M.D.  
Louisville  
Phillip Harrell Yunker, M.D., Maysville  
George H. Zenger, M.D., Louisville



# Continuing Medical Education

## October

- 5-9 Diabetes In Depth Training Workshop, Lexington, Kentucky. Contact: Kathy Wheeler, Kentucky Diabetes Foundation, 120 N. Eagle Creek Dr., #321, Lexington, KY 40509, (606) 263-5032.
- 8-11 AMA National Conference on the Impaired Health Professional, Drake Hotel, Chicago, Illinois. Contact: Janice J. Robertson, AMA Department of Substance Abuse, 535 N. Dearborn Street, Chicago, IL 60610, (312) 645-5083.
- 15-16 21st Annual Newborn Symposium, Kosair Children's Hospital Auditorium, Louisville, Kentucky. Contact: Larry N. Cook, M.D., Professor and Associate Chairman, Department of Pediatrics, School of Medicine, University of Louisville, Louisville, KY 40292, (502) 562-8826.
- 16 Diabetes Care in the Hospital Setting, designed for the nurse working with diabetic patients in the inpatient hospital setting, Lexington, Kentucky. Contact: Kathy Wheeler, Kentucky Diabetes Foundation, 120 N. Eagle Creek Dr., #321, Lexington, KY 40509, (606) 263-5032.
- 16-17 Bone Marrow Transplantation for Patients Without Matched Donors, University of Kentucky, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.
- 23-24 Overview of Geriatric Medicine and a Strategy for Geriatric Boards, Knoxville, Tennessee, presented by the Tennessee Geriatrics Society and American Medical Directors Association. Contact: James A. Greene, M.D. or Diane Burkett, Center for Health & Creative Aging, 9330 Park West Blvd., Suite 502, Knoxville, TN 37923, (615) 694-0076.

25-30

Eighteenth Family Medicine Review — Session III, University of Kentucky, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.

## December

- 16-17 Advanced Trauma Life Support, University of Kentucky, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.
- 18-19 Trauma Update 1987, University of Kentucky, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.

## 1988

### February

- 21-26 Nineteenth Family Medicine Review — Session I, University of Kentucky, Lexington, Kentucky. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, University of Kentucky, Lexington, KY 40536-0086, (606) 233-5161.

### May

- 9-13 Diabetes In Depth Training Workshop, Lexington, Kentucky. Contact: Kathy Wheeler, Kentucky Diabetes Foundation, 120 N. Eagle Creek Dr., #321, Lexington, KY 40509, (606) 263-5032.

# Classified

Short (670 mm in length) colonoscope, Large operating channel. TCF is hardly used, (502) 895-5429 days; (502) 245-5283 nights.

**FAMILY PRACTICE PHYSICIAN**—B.C. or B.E. needed in rural primary care center. Hospital based primary care system with four offices and a growing team of F.P. physicians. Join the team—yet develop own practice. Privileges at progressive regional referral hospital with medical school affiliations; preceptorship to F.P. residents available. Near university, cultural and recreational activities, and 8,000 acre Cave Run Lake. Excellent salary and benefits with paid malpractice insurance. Send curriculum vitae to: Primary Care System, ST. CLAIRE MEDICAL CENTER, INC., 222 Medical Circle, Morehead, Kentucky 40351, ATTN: Betty Hughes.

**EMERGENCY MEDICINE** physicians needed in southwestern Kentucky near the Kentucky Lake Area for a full time practice in the ER of 210-bed hospital. Potential earnings exceed \$80,000 and we procure professional liability insurance on your behalf. For addi-

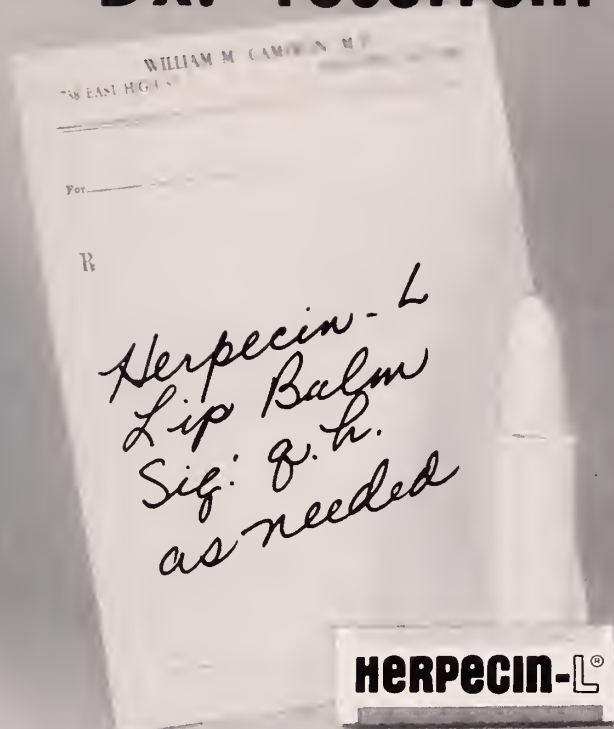
tional information Contact: Tom Baldwin, Coastal Emergency Services, Inc., 425 N. New Ballas Rd., Ste. 295, St. Louis, MO 63141; collect (314) 432-0210 or (800) 227-2533 outside Missouri.

**WESTERN KENTUCKY**—Seeking physicians for evening and weekend coverage in a low volume emergency department. Attractive schedule and compensation. Malpractice insurance provided. Contact: Emergency Consultants, Inc., 2240 South Airport Road, Room 31, Traverse City, MI 49684; or call 1-800-253-1795 or in Michigan 1-800-632-3496.

Two busy FP's seeking part time associate. Located within one hour of Lexington and 1½ hour from Cincinnati and N.E. Kentucky. Future full time position available if desired. No capital investment required. No management hassles. Send inquires to

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Needed now to work with an unique, internationally respected rural health system network in Kentucky which includes a hospital, satellite clinics, a home health agency and a school of advanced nursing. A regional medical center is within 20 miles. The practice environment is stimulating – physicians and ARNP's work in joint practice teams; interaction with students is encouraged; the rural population presents a great range and intensity of medical problems.

The setting is in heavily-wooded mountains with a moderate 4-season climate. Seven state parks are within 80 miles.

Superior compensation/benefits package includes a guaranteed salary with incentives and malpractice. Call Deborah Pennington COLLECT at 1-502-897-2556.





## **Case Study: Larry McAfee** **Diagnosis: C-1 Complete** **Prognosis: Promising**

*Contact the Admissions Office for routine information. A physician is on 24-hour call to assist in emergency arrangements.*

When 28 year-old Larry McAfee was brought to Shepherd Spinal Center as a result of a motor-cycle accident in late 1985, he was classified as a C-1 complete spinal cord injury. He was suffering from severe burns on his right ankle, massive atelectasis, pneumothorax and pneumonia. Paralyzed instantly at the first cervical vertebrae below the brain stem, he required mechanical ventilation for breathing.



The road to a meaningful quality of life has been a long one for Larry, requiring intensive medical care, rehabilitation, counseling—and Larry's own unsinkable spirit.

We couldn't promise Larry miracles, but we could promise him the care of the largest rehabilitation hospital in the nation specializing in paralyzing spinal cord disorders, Shepherd Spinal Center in Atlanta. With the help of various adaptive devices and skilled attendants, it is possible for Larry to live independently

in an apartment since his discharge from Shepherd. He now actively pursues his goal of a career as a computer programming consultant.

At Shepherd Spinal Center, our ultimate challenge is to assist patients like Larry in a comprehensive High Quadriplegia Program, (C 1-4). We involve referring physicians in all aspects of discharge planning for follow-up medical supervision with the hope that patients like Larry will go home again.

Your patients count on you. Accept the challenge and work with us...for them.

*The Georgia Regional Spinal Cord Injury Center/Fully Accredited by CARF and JCAH/Designated "Model Spinal Cord Injury Program" by U.S. Dept. of Ed./Now offering a comprehensive Spina Bifida Program/Nation's Largest Dedicated Spinal Cord Injury and Disease Treatment Facility.*

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# "High Quadriplegia— The Ultimate Challenge"

Plan to attend:

## **A two-day symposium at Colony Square Atlanta**

**April 7-8, 1988**

**Registration: \$225**

Symposium  
Co-Chairmen

David F. Apple, Jr., M.D.  
Medical Director

Donald P. Leslie, M.D.  
Medical Director  
High Quadriplegia Program

A medical symposium addressing the acute and rehabilitative care of the C-1 through C-4 high quadriplegic. Hosted by Shepherd Spinal Center in Atlanta, now the nation's largest dedicated spinal cord injury hospital. Issues to be investigated include: medical, psychosocial and high tech approaches to care and rehabilitation. Special emphasis on ventilator weaning, the interdisciplinary care approach, phrenic nerve pacer implants and community reintegration.

### **Symposium Preview:**

#### ***High Quadriplegics: They Can Go Home Again***

With high quadriplegics surviving at unprecedented rates, quality of life issues and discharge planning are of paramount importance from the first

day of admission to the specialty setting. The philosophy of treatment at SSC will be covered, including the referring physician's role in long-term medical management.

#### ***Medical Overview: Care of the High Quadriplegic***

The potential for complications such as deep vein thrombosis, stress ulceration, decubitus, pneumonia, urinary tract infections and sepsis poses a serious threat to high quadriplegic patients. Prevention strategies, the benefits of early mobilization of ventilator dependent patients and medical management of complications are covered.

#### ***Ventilator Weaning***

All high quadriplegics at Shepherd Spinal Center are evaluated to determine their candidacy for phrenic nerve pacer implants and their potential for weaning from mechanical ventilation. The pulmonary evaluation studies performed at SSC and protocols for weaning are included.

### ***Panel and Concurrent Session Topics:***

- ☐ Pulmonary Issues
- ☐ Social Work: Discharge Planning, Peer Support, Sexuality
- ☐ The Therapeutic Value of Sensory Experience
- ☐ The Biofeedback Program at SSC
- ☐ Ventilator Home Care
- ☐ Focus On: Phrenic Pacer Implantation
- ☐ Departmental Presentations by O.T., P.T., Recreation Therapy, Social Work, Respiratory Care, Education, Nutritionists
- ☐ Emphasis on specialized equipment

#### ***For Physicians Only:***

Grand Rounds at Shepherd Spinal Center

REGISTRATION IS LIMITED. Reserve your space today, by sending a check for \$225, payable to Shepherd Spinal Center, to: Lesley M. Hudson, Symposium Registrar, Shepherd Spinal Center, 2020 Peachtree Road, N.W., Atlanta, GA 30309. Confirmations of early registrations and a symposium information packet will be mailed in October.

### ***High Quadriplegia— The Ultimate Challenge***

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Specialty \_\_\_\_\_

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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Check one: ☐ Check enclosed.  
Reserve my space now. ☐ Please send a  
complete information  
packet.



## Highlights of Emergency Medical Care Seminar



E. Truman Mays, MD, Somerset, Chairman, Emergency Medical Care Seminar

The 17th Annual KMA Emergency Medical Care Seminar was held in Owensboro this year—the first time it has been held outside of Louisville. The location change offered an opportunity for some who had not attended in the past. More than 400 people attended the meeting in June, and 50 Kentucky physicians, nurses, EMTs and paramedics served as faculty.

Three themes were covered during this year's program: "Physiology and Pathophysiology of Shock"; "Ventilation and Gas Exchange of the Lungs"; and "Prevention of Serious Injuries and Critical Illness."

Next year's meeting will be held in Louisville at the Executive West, June 7, 8 and 9.



The annual ambulance competition is enhanced by "mock" accident victims.



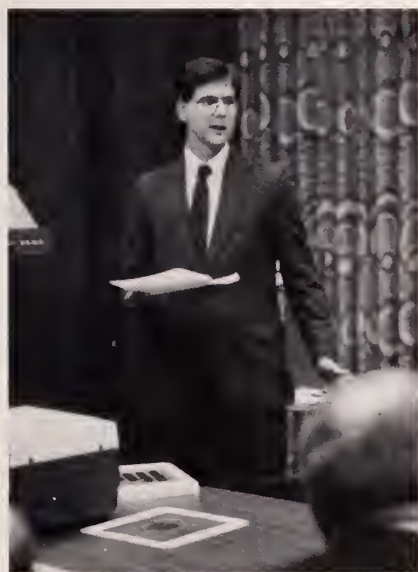
One of the many exhibits at the EMCS.

## KMA Announces PLI Survey Results at Press Conference



Richard Hensch, MD, KMA President, discusses the PLI survey with a local TV station reporter.

As part of the KMA Professional Liability Insurance Campaign, a survey was conducted by the national research firm of Hamilton, Frederick & Schneiders to measure Kentuckians' opinions about medical liability



Pollster Keith Frederick reviews the survey with KMA officers and media representatives.

insurance and health care costs.

In a press conference held at KMA on June 19, 1987, pollster Keith Frederick explained that according to the research, eight of every 10 Kentuckians believe that efforts to resolve the malpractice insurance crisis should be a major priority in the next legislative session.

By a two-to-one margin, 60% to 30%, those polled supported limits for non-economic damages that a jury can award in a medical malpractice case.

Mr. Frederick said, "Clearly from the survey data, it can be concluded that Kentuckians are consistent in their views relative to the liability insurance system and legal process. The general public supports a wide range of reforms from promoting out-of-court settlement to reducing legal fees and awards. And, they express a strong desire to have the legislature do something about the issues as soon as possible."

"We intend to circulate this survey to every member of the KMA," said

President Richard Hensch, MD, of Lexington. "The results confirm our position that the public will support steps to solve this serious problem. Action is needed not only to contain rising medical malpractice insurance costs, but to prevent a shortage of medical care, which is jeopardizing the availability of health services in many parts of the state."



## **1987 Reference Committees**

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Charles F. Allnut, M.D., Covington (Kenton)  
Allen E. Grimes, M.D., Lexington (Fayette)  
Cecil L. Grumbles, M.D., Louisville (Jefferson)  
Mary L. Wiss, M.D., Pikeville (Pike)

### **Reference Committee No. 2**

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John D. Ammon, M.D., Florence (Boone)  
John W. Collins, M.D., Lexington (Fayette)  
Russell H. Davis, M.D., Pikeville (Pike)  
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Willis P. McKee, Jr., M.D., Frankfort (Franklin)  
Paul R. Smith, M.D., London (Laurel)

### **Reference Committee No. 4**

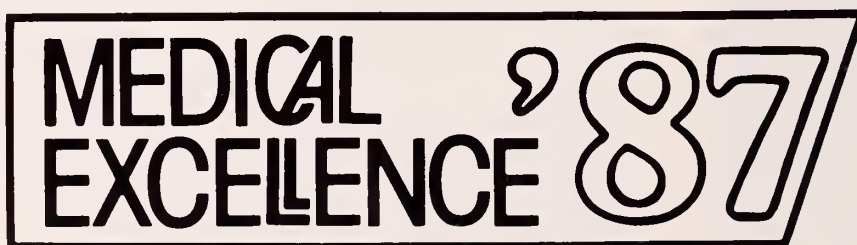
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**September 15-17**  
**Ramada Inn East/Bluegrass Convention Center**  
**Louisville, Ky.**



## **New Physician Workshop Set for November 5-6**

KMA's sixth "How to Get Started in Medical Practice" Seminar will be held Thursday and Friday, November 5-6, at the KMA Headquarters Office in Louisville. The day-and-a-half workshop is designed for physicians seeking direction in establishing a medical practice and includes information on marketing techniques, financing, medical records, scheduling, personnel and collections. For registration information, contact Diane Maxey at the KMA Office.

## **More Practice Management Workshops Scheduled**

Because of the growing interest in KMA's practice management workshops, a fall series is being planned by the Membership Committee. Chairman Harold D. Haller, Sr., M.D., reported that over 150 physicians and office personnel attended the June workshops on "Third Party Reimbursement and Coding" presented by Conomikes Associates, Inc. Since a number of people are on a waiting list to attend, a third series, which will again be cosponsored by the Jefferson and Fayette County Medical Societies, has been scheduled as follows:

### **"How to Improve Third Party Reimbursement & Coding"**

Tuesday, November 3, 1987 — Lexington

Wednesday, November 4, 1987 — Louisville

9 a.m. to 4 p.m.

Registration for the workshop, which is limited to 55 participants, is \$155 per enrollee. A registration form may be requested by contacting the offices of KMA, JCMS or FCMS.



## *IN MEMORIAM*

**William Ellsworth Davis, M.D.**  
**Paris**  
**1896-1987**

William E. Davis, M.D., a retired public health physician for Bourbon, Harrison and Scott Counties, died April 2, 1987. A 1927 graduate of the Northwestern University Medical School, Doctor Davis was a life member of the KMA.

**Walker Air, M.D.**  
**Ludlow**  
**1905-1987**

Walker Air, M.D., a retired general practitioner, died April 3, 1987. Doctor Air was a graduate of the University of Cincinnati College of Medicine and a life member of KMA.

**Bruce Brier Mitchell, M.D.**  
**Louisville**  
**1913-1987**

Bruce B. Mitchell, M.D., a retired OB/GYN died April 4, 1987. A 1939 graduate of the University of Louisville School of Medicine, Doctor Mitchell had been a member of KMA since 1952.

**William Robert Kelsay, Jr., M.D.**  
**Monticello**  
**1914-1987**

William R. Kelsay, Jr., M.D., a retired public health physician for Clinton, Cumberland and Wayne Counties, died April 19, 1987. Doctor Kelsay was a 1939 graduate of the University of Louisville School of Medicine and a life member of KMA.

**Sidney P. Cooper, M.D.**  
**Lexington**  
**1903-1987**

Sidney P. Cooper, M.D., a retired surgeon, died April 26, 1987. Doctor Cooper was a 1930 graduate of the University of Cincinnati College of Medicine and a life member of the KMA.

**William McVey Townsend, M.D.**  
**Falmouth**  
**1908-1987**

William McVey Townsend, M.D. a retired General Practitioner, died May 3, 1987. A 1934 graduate of the Uni-

versity of Louisville School of Medicine, Doctor Townsend was a life member of KMA.

**Lyman S. Hall, M.D.**  
**Campbellsville**  
**1897-1987**

Lyman S. Hall, M.D., a retired OB-GYN, died May 18, 1987. A life member of KMA, Doctor Hall graduated from the University of Louisville School of Medicine in 1925.

**J. Maxine Shenk, M.D.**  
**Covington**  
**1914-1987**

J. Maxine Shenk, M.D., a retired general practitioner, died in May 1987. A 1951 graduate of the University of Louisville School of Medicine, Doctor Shenk was a life member of KMA.

**Francis J. "Jerry" Smith, M.D.**  
**Crestwood**  
**1918-1987**

Francis J. "Jerry" Smith, M.D., a retired general surgeon and a retired physician for the U.S. Postal Service, died June 8, 1987. Doctor Smith was a 1944 graduate of the University of Rochester School of Medicine and a life member of KMA.

**Carl Hale Fortune, M.D.**  
**Lexington**  
**1900-1987**

Carl Hale Fortune, M.D., a retired internist, died June 9, 1987. Doctor Fortune was Past President of the Fayette County Medical Society, the Kentucky Society of Internal Medicine, and a former governor for Kentucky in the American College of Physicians. He was a 1926 graduate of the University of Michigan Medical School and a life member of KMA. Doctor Fortune received KMA's Distinguished Service Award in 1968.

**Dixie Edward Snider, M.D.**  
**Springfield**  
**1915-1987**

Dixie Edward Snider, M.D., a general practitioner in Springfield for almost 40 years before retiring in 1984, died June 29, 1987. Doctor Snider served KMA as Fourth District Trustee from 1959 to 1965. He was a 1940 graduate of the University of Louisville School of Medicine and a life member of KMA.

## **ASSOCIATION**

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**Edward Hunt Ray, M.D.**  
**Lexington**  
**1899-1987**

Edward Hunt Ray, M.D., a retired Lexington urologist, died July 6, 1987. Doctor Ray had been chairman of the Advisory Commission to Study the Status of Medical Education in Kentucky, which concluded that the state should have a medical school at UK. Doctor Ray started at UK as a professor, then became chairman of the urology division. A visiting professorship in urology at UK was named in his honor. He served as president of the Kentucky Chapter of the American College of Surgeons in 1961; secretary and chairman of the AMA's urology section in the late 1950s and early 1960s; president of the Kentucky Surgical Society in 1970; and president of the Fayette County Medical Society. A 1922 graduate of Tulane University, Doctor Ray was a life member of KMA.

**William V. Banks, M.D.**  
**Covington**  
**1939-1987**

William V. Banks, M.D., a preventive medicine physician, died July 12, 1987. Doctor Banks graduated from the University of Kentucky College of Medicine in 1967 and was an active member of KMA.

**H. Burl Mack, M.D.**  
**Anchorage**  
**1910-1987**

H. Burl Mack, M.D., a general practitioner in Pewee Valley for 45 years, died July 16, 1987. Doctor Mack gradu-

ated from the College of Medical Evangelists in 1938 and was named Most Outstanding General Practitioner in the state by the Kentucky Academy of General Practice. He was a member of KMA, and was a past member of the KMA Peer Review Board.

**Howell Jeffries Davis, M.D.**  
**Owensboro**  
**1908-1987**

Howell Jeffries Davis, M.D., a retired General Surgeon, died in July, 1987. He graduated from the University of Pennsylvania School of Medicine in 1933 and was a life member of KMA.

**Margurite E. T. Thompson, M.D.**  
**Pikeville**  
**1931-1987**

Margurite E. T. Thompson, M.D., a General Practitioner, died August 2, 1987. Doctor Thompson was a 1958 graduate of the University of Louisville School of Medicine and a member of KMA.

**Orion Leon Higdon, M.D.**  
**Paducah**  
**1902-1987**

Orion Leon Higdon, M.D., a retired OB-GYN, died August 7, 1987. Doctor Higdon graduated from Eclectic Medical College in 1929 and was a life member of KMA.



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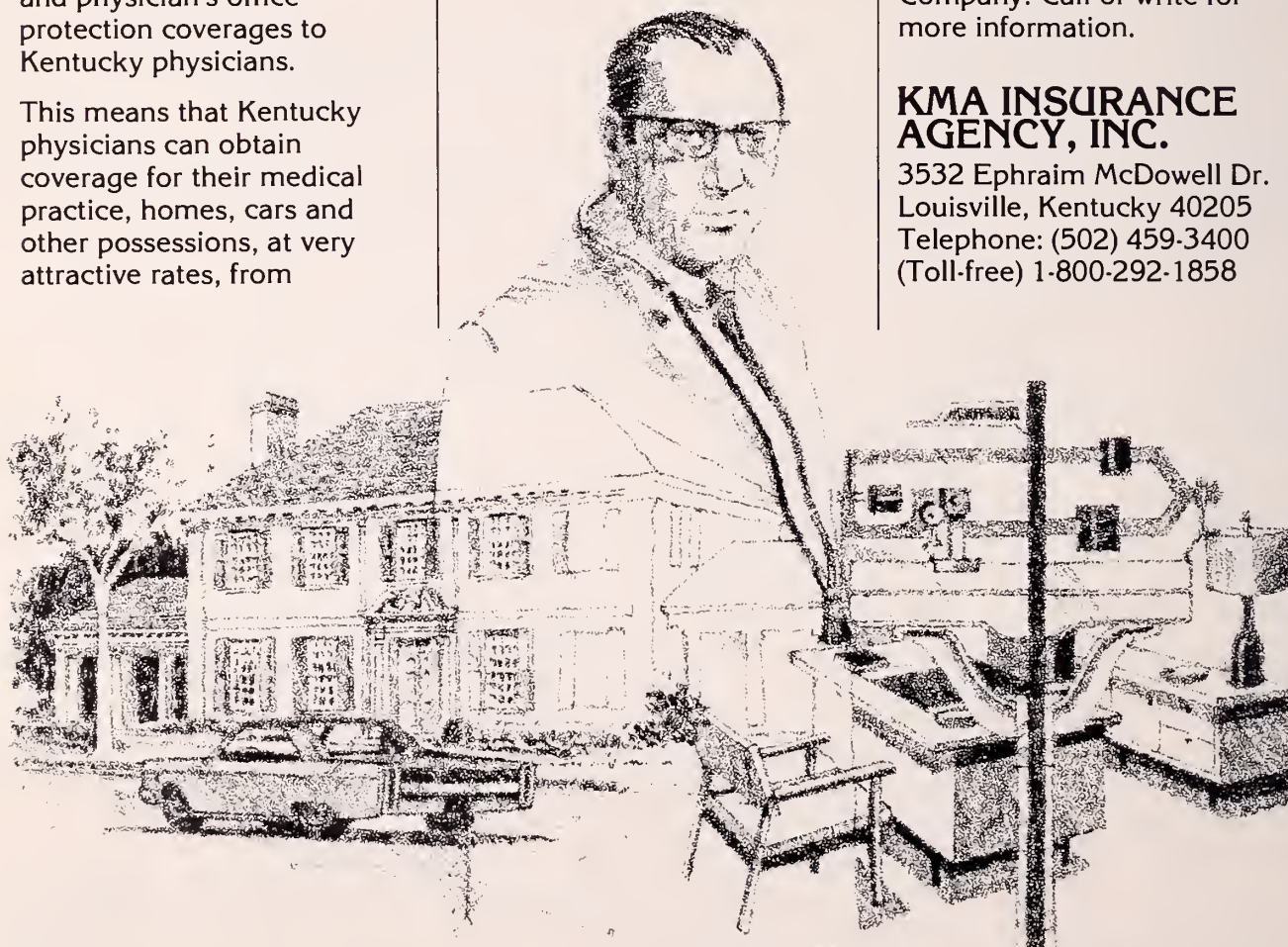
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Reduced 90%	Reduced 86%	Reduced 72%	Reduced 62%	Reduced 60%

- Only 1/3 the dropout rate due to side effects of amitriptyline alone, although the incidence of side effects is similar<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

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Protect your decision.  
Write "Do not substitute."

## In moderate depression and anxiety

# Limbitrol<sup>®</sup>

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) <sup>(IV)</sup>

# Limbitrol<sup>®</sup> DS

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) <sup>(IV)</sup>

References: 1. Feighner JP, et al. *Psychopharmacology* 61: 217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

### Limbitrol<sup>®</sup> <sup>(IV)</sup>

#### Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** Relief of moderate to severe depression associated with moderate to severe anxiety.  
**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

**Warnings:** Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to clordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for clordiazepoxide).

**Precautions:** Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated, sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

**Adverse Reactions:** Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

**Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

**Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

**Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

**Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

**Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

**Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

**Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

**Endocrine:** Testicular swelling and gynecomastia in the male; breast enlargement, galactorrhea and minor menstrual irregularities in the female; elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

**Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Overdosage:** Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**Dosage:** Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol DS (double strength) Tablets, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol Tablets, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500, Tel-E-Dose<sup>®</sup> packages of 100, Prescription Paks of 50.



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In depressed and anxious patients, you can see the difference sooner—62% of total four-week improvement achieved in the first week with Limbitrol versus 44% with amitriptyline.<sup>1</sup>

**In moderate  
depression  
and anxiety**

## Limbitrol<sup>®</sup>

Each tablet contains 5 mg clordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) 

## Limbitrol<sup>®</sup> DS

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) 

ROCHE

Please see summary of product information on adjacent page.

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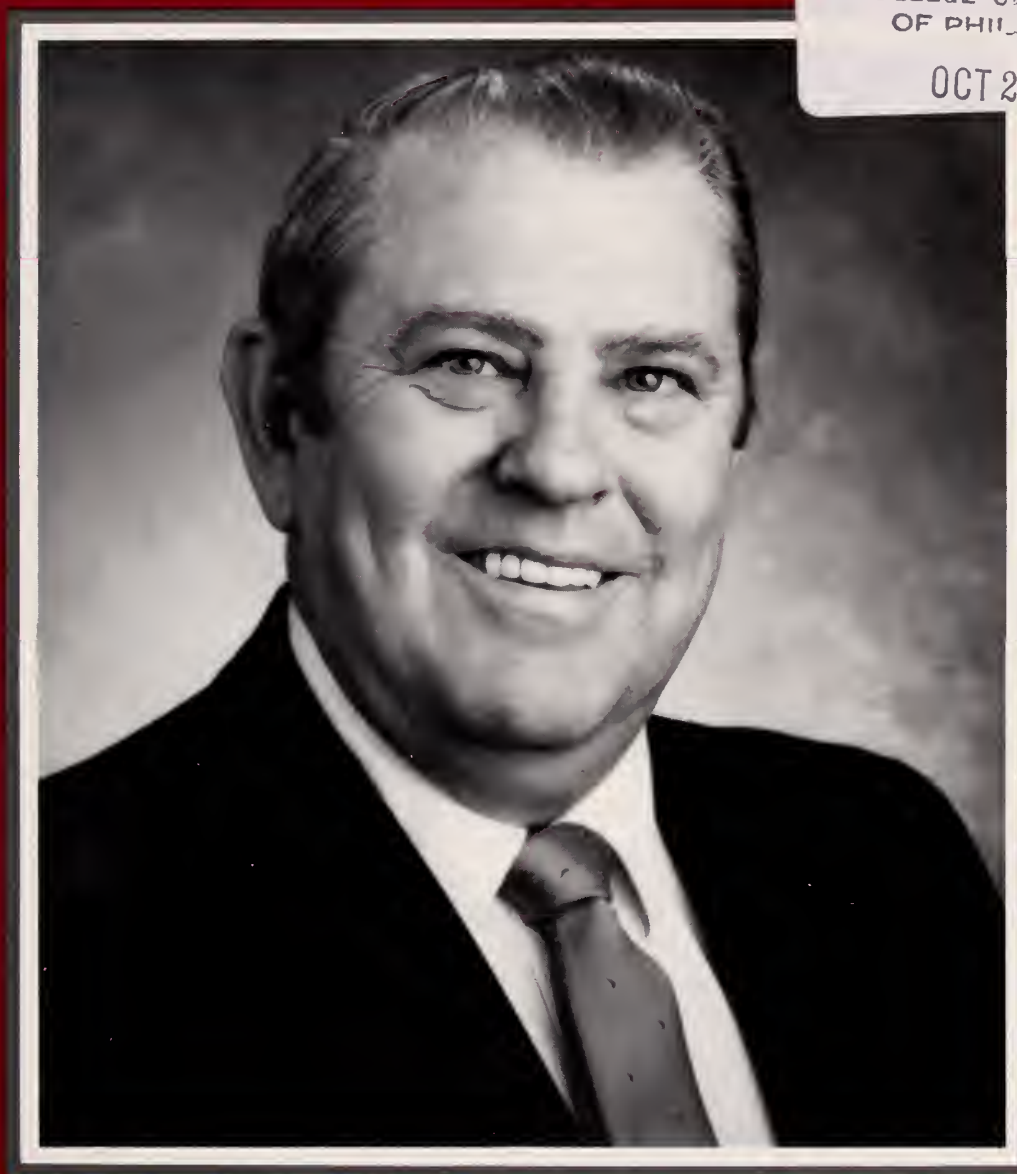
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**Donald C. Barton, MD**  
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Volume 85, Number 10

October 1987



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## PRESIDENT'S PAGE

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**B**y now, the long, hot summer has passed and we have begun another Associational year. With the Legislative Session convening in January, I anticipate a long, hot winter too. Our profession continues to be assaulted on all fronts by nurse practitioners, physical therapists, respiratory therapists, and many other health providers. They all want to practice medicine without a license. Leadership will continue to stay on top of these ill-advised proposals, along with our able staff, as we pursue our number one priority, professional liability reform.

The Professional Liability Campaign is well under way under the able leadership of our Chairman, Wally Montgomery, and past President, Dick Hench. Dick has volunteered to continue his leadership in this campaign, and we welcome and appreciate his efforts. The physician brochures and legislative packages should be out by now, and I urge you to make good use of them.

KMA Leadership and Key contacts are in the process of meeting with the entire legislature to outline our concerns and seek support for tort reform. The Key Contact System was updated this summer, as hometown or doctor to legislator contact is extremely important in our legislative effort.

As Wally and Dick have stressed all year, if we are to successfully adopt tort reform, every physician in the state must become involved. This cannot be left to the officers and a few Key contacts to get accomplished. Everyone must understand our game plan and follow it. We must convince our colleagues, our patients, the public, fellow businessmen, and fellow professionals that the liability problem is at crisis proportions and that it is a *public crisis*. We must convince them that this crisis affects the quality, delivery, and access to health care, as well as contributing to rising health costs.

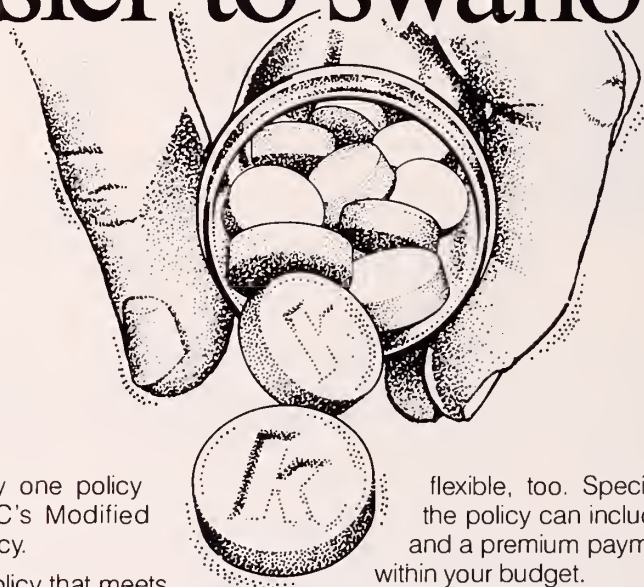
If we will all work, the General Assembly will listen to our proposals and provide legislative relief. The key phrase is "physicians must." It's up to you.

In closing, I wish to thank you for electing me to represent you as your President for the coming year. It is an honor I accept with humility, and I'll do my best, with your help, to make this a successful year.

**Donald C. Barton, MD**  
**KMA President**



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**INDERAL<sup>®</sup> LA**  
(PROPRANOLOL HCl)

after a major nationwide trial...





An aerial photograph of a large, modern stadium at dusk. The stadium is filled with spectators, and the football field is brightly lit. The surrounding area includes a cityscape and a river. The text is overlaid on the upper part of the stadium.

...we had  
to find  
just the  
right room.



# 60,073 patients (90%) who started on INDERAL LA stayed on INDERAL LA.<sup>1\*</sup>

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## Surprising? Not really.

Because most patients on INDERAL LA (propranolol HCl) don't even know it's working.

A recent double-blind, placebo-controlled, crossover study in 138 hypertensive patients<sup>2</sup> revealed that INDERAL LA has a side effects profile unsurpassed by atenolol or metoprolol — which shows how well-tolerated once-daily INDERAL LA can be.

## Sole therapy or concomitant therapy?

**Fifty-nine percent of the time, INDERAL LA stood on its own.**

The patients in the nationwide compliance trial were no different from yours. Generally when the antihypertensive regimen is complicated, compliance may become a problem. So, the effectiveness of INDERAL LA as once-daily monotherapy is a big plus. Of the remaining hypertensives in the program, 36% were treated merely with the addition of a diuretic to INDERAL LA.

## For the noncompliant patients in your practice, INDERAL LA may well be the answer.

Almost 20,000 of the patients in the nationwide compliance trial were identified as having been noncompliant with their previous antihypertensive therapy. Their physicians reported that 88% showed improved compliance when placed on once-daily INDERAL LA.

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## Control, comfort, and compliance

ONCE-DAILY  
**INDERAL<sup>®</sup> LA**  
(PROPRANOLOL HCl) LONG ACTING CAPSULES

Like conventional INDERAL Tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma.

\*After a 30-day trial with INDERAL LA, physicians reported that 90% of the patients would remain on INDERAL LA.

**The one you know best  
keeps looking better**

NEW LOW DOSE  
**INDERAL<sup>®</sup> LA 60 mg**  
(PROPRANOLOL HCl) LONG ACTING CAPSULES  
NOW AVAILABLE...

Please see next page for brief summary of prescribing information



# The one you know best keeps looking better

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR)

## INDERAL® LA brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** INDERAL LA is formulated to provide a sustained release of propranolol hydrochloride. INDERAL LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** INDERAL is a nonselective beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE. Hypertension:** INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** INDERAL LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first-degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

**WARNINGS. CARDIAC FAILURE.** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY.** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOLYCEMIA.** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS.** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing T<sub>4</sub> and reverse T<sub>3</sub>, and decreasing T<sub>3</sub>.

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS. GENERAL.** Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should

be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**CLINICAL LABORATORY TESTS.** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS.** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncope, attacks, or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium-channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytoin, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrine and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected T<sub>3</sub> concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY.** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY.** Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS.** INDERAL is excreted in human milk. Caution should be exercised when INDERAL (propranolol HCl) is administered to a nursing woman.

**PEDIATRIC USE.** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular.** Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

**Central Nervous System.** Light-headedness, mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to cataplexy, visual disturbances, hallucinations, vivid dreams, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometric tests. For immediate formulations, fatigue, lethargy and vivid dreams appear dose related.

**Gastrointestinal.** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic.** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory.** Bronchospasm.

**Hematologic.** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-immune.** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous.** Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSEAGE AND ADMINISTRATION.** INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL Tablets to INDERAL LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg-for-mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg INDERAL LA once daily.**  
**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## REFERENCES:

1. INDERAL LA National Compliance Evaluation Program. Data on file, Ayerst Laboratories.
2. Ravid M, Lang R, Jutrin I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985; 145:1321-1323.

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# Conservative Surgery and Irradiation in the Management of Early Breast Cancer

Baby Jose, MD; Robert D. Lindberg, MD; Kristie G. Jones, MD;  
John Marshall, BS; William J. Spanos, Jr., MD

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*Thirty-eight patients (40 breasts) with clinical stages AJC (American Joint Committee for Staging) I-III breast cancer underwent conservative surgery and irradiation in the Department of Radiation Oncology, University of Louisville School of Medicine from 1977-84. Sixty percent of the patients were staged as Stage I and 28 patients had negative axillary lymph nodes at the time of pathological examination. Wide excision (45%) was the most commonly used surgical procedure. Most of the patients (33/40) received a dose of 5000 rads external irradiation to the breast in five to 5½ weeks time, five days per week. The boost dose as given by electron beam (27 patients) or by <sup>192</sup>Ir implant (nine patients). Thirty patients (75%) had acute skin reaction which subsided in four to six weeks time. Two patients who developed symptomatic pneumonitis were managed by conservative measures. Local failure occurred in one patient (2.6%) which was salvaged by local excision. One patient developed liver metastasis at 24 months and was treated with combination chemotherapy. The mean follow-up is 28 months, with a range of six to 103 months. Cosmesis was assessed to be good in 88% of the patients and acceptable in 10%. One patient was felt to have poor result. This preliminary study shows that by conservative surgery and irradiation in early breast cancer, breast preservation is possible with good cosmesis.*

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## Introduction

While the optimal management of early breast cancer is still controversial, conservative surgery and irradiation have been accepted as an alternative to mastectomy. Multiple retrospective as well as prospective studies have shown no advantage of one form of treatment over the other in terms of local-regional control or survival.<sup>1-19</sup> The apparent benefit of conservative surgery and irradiation is preservation of the breast with very little cosmetic impairment. The purpose of this report is to present the experience in the Department of Radiation Oncology, University of Louisville School of Medicine, James Graham Brown Cancer Center.

## Materials and Methods

The records of 38 patients (40 breasts) with AJC Stages I-III<sup>9</sup> who were treated from 1977-1984 with conservative surgery and irradiation were reviewed. Thirty-two patients were white and six were black. The median age was 50 years and 37% of patients were in the 41-50 years range (Table I).

The pathological staging, tumor size and lymph node status are shown in Table II. Twenty-four patients (60%) were Stage I and 28 patients had negative axillary lymph nodes at the time of pathological examination. Table III depicts the different types of conservative surgical procedures as defined in the recent publication,<sup>13</sup> wide excision being the most commonly used procedure. Fifteen patients had full axillary dissection in all three levels (Table IV) and the difference in the lymph node evaluation was due to the evolving surgical concepts by the different surgeons. The median number of nodes obtained was 11, with a range of two to 30.

Radiotherapy consisted of external radiation to the whole breast using tangential open and wedge fields over a period of 4½ to 5½ weeks time using Co<sup>60</sup> or 6 MV linear accelerator. The dosimetry was carefully done with a computerized dosimetry system. CT scans of the



**TABLE I**  
BREAST CANCER - SURGERY & RADIATION  
U OF L - BROWN CANCER CENTER  
1977-1984

Age Distribution	
Age	Patients (%)
< 30 yrs.	2 ( 5.3)
31 - 40 yrs.	4 (10.6)
41 - 50 yrs.	14 (36.7)
51 - 60 yrs.	5 (13.2)
> 60 yrs.	13 (34.2)

Median Age 50 yrs.

Mean Age 54 yrs.

breast and chest were done to define the relation of the lung and chest wall to the breast. Most of the patients (33/40) received a dose of 5000 rads in five to 5½ weeks time, five days per week. The boost dose was given either by appositional electron beam (27 patients), or by <sup>192</sup>Ir implant (nine patients). Four patients had no boost since re-excision was negative. The majority of these patients (20) received a boost dose of 1500 to 2000 rads. In some patients, the upper portion of the breast, outside the tangential fields, was treated with a separate electron field based on the depth of the breast tissue as shown in the CT scans. Patients with positive axillary nodes received adjuvant chemo or chemohormonal therapy.

All patients are followed four to six weeks after completion of treatment and then every two to three months for two years, four to six months up to five years and every year after that. In addition to the clinical examination, patients have routine laboratory tests, chest X-rays and mammograms. The mean follow-up is 28 months, with a range of six months to 103 months (Table VIII). Cosmesis is assessed in terms of breast size, edema, retraction, fibrosis, skin changes and loss of tissue secondary to surgery. Also, at each follow-up patients are evaluated for the presence of any side effects such as arm edema, symptomatic pneumonitis, rib fracture, brachial plexus injury and skin changes.

## Results

Local failure occurred in one patient (2.6%) who was salvaged by local excision and that patient is disease free 36 months post re-excision (Table V). One patient developed liver metastasis at 24 months and was treated with combination chemotherapy and is alive.

**TABLE II**  
BREAST CANCER - SURGERY & RADIATION  
U OF L - BROWN CANCER CENTER  
1977-1984

STAGE DISTRIBUTION (Pathological)		
Stage	Cases	
I	T <sub>is</sub> N <sub>0</sub> M <sub>0</sub>	3
	T <sub>1</sub> N <sub>0</sub> M <sub>0</sub>	19
	T <sub>1</sub> N <sub>x</sub> M <sub>0</sub>	2
II	T <sub>1</sub> N <sub>1</sub> M <sub>0</sub>	3
	T <sub>2</sub> N <sub>0</sub> M <sub>0</sub>	6
	T <sub>2</sub> N <sub>1</sub> M <sub>0</sub>	4
	T <sub>2</sub> N <sub>x</sub> M <sub>0</sub>	2
III a	T <sub>3</sub> N <sub>x</sub> M <sub>0</sub>	1

60%

37%

3%

T - Tumor

N - Node

M - Metastasis

T<sub>1</sub> - 2 cm or < 2 cm in size.

T<sub>2</sub> - > 2 cm but < 5 cm in size.

T<sub>3</sub> - > 5 cm in size.

T<sub>is</sub> - Tumor in situ

**TABLE III**  
BREAST CANCER - SURGERY & RADIATION  
U OF L - BROWN CANCER CENTER  
1977-1984

SURGICAL MANAGEMENT	
Procedure*	Cases
Local Excision	8 (20%)
Wide Exeision**	18 (45%)
Quadrantectomy	14 (35%)

\*NEW ENG. J. MED. 313:1365, 1985

\*\*Resection of the tumor with enough normal tissue around (1-1.5 cm) removed, with clear margins.

**TABLE IV**  
BREAST CANCER - SURGERY & RADIATION  
U OF L - BROWN CANCER CENTER  
1977-1984

NODAL EVALUATION & RESULTS		
Dissection	Cases	Positive
None	5	0
Level I	5	1/5
Level I & II	15	3/15
Full (I,II,III)	15	3/15

Cosmesis was assessed to be good in 88% of the patients and acceptable in 10% (Table VI). One patient was felt to have poor result. The poor cosmesis was primarily attributed to breast fibrosis and retraction and a decrease in the size of the breast. Also, cosmesis was related to the time interval from completion of radiation treatments.

Thirty patients (75%) had acute skin reactions which included erythema and some exfoliation at the time of completion of treatments (Table VII). All of the acute reactions subsided in four to six weeks time with symptomatic management. Two patients, having symptomatic pneumonitis, were managed by conservative measures. No patient incurred a brachial plexus injury, soft tissue necrosis or rib fracture.

### Discussion

Local-regional control was achieved in 97% of patients with good cosmesis in 88% of treated patients. These numbers may change, as we continue to follow and study these groups of patients. Currently, the majority of these patients are treated after the limited excision of the primary with clear margins at the time of surgery and axillary dissection of at least Levels I & II. Axillary dissections provide prognostic information regarding the nodal status which are used in decision making for adjuvant chemotherapy.

The doses used for boost following tangential fields were higher in earlier experience. More recently the boost dose is limited to 1000 rads with electrons unless there is a suspicion of gross residual disease.

The local recurrence rate is related to the initial surgical procedure. Patients who had incisional biopsy had been reported to have an increased incidence of local recurrence.<sup>1,3,12</sup> Surgical diligence should be maintained in obtaining total removal of the tumor with negative margins. Romsdahl *et al* reported a 3% recurrence rate in patients who had excisional biopsy at M.D. Anderson Hospital compared to 8% in patients undergoing excisional biopsy elsewhere. In patients who have questionable initial surgical procedures, re-excision is recommended to obtain clear margins.

However, the necessity of generous margins such as segmental resection is questionable. Generous margins have the disadvantage of increased breast distortion and probably do not improve local control over excisional biopsy with clear margins.

In summary, this is a preliminary report on our experience in the management of early breast cancer by

**TABLE V**  
**BREAST CANCER - SURGERY & RADIATION**  
**U OF L - BROWN CANCER CENTER**  
**1977-1984**

#### RESULTS OF TREATMENT

Current Status	Patients (%)
Local Control	37 (97.4)
Local Recurrence	1 ( 2.6)*

\*Salvaged by local resection - NED 36 mo postoperative.

**TABLE VI**  
**BREAST CANCER - SURGERY & RADIATION**  
**U OF L - BROWN CANCER CENTER**  
**1977-1984**

#### COSMETIC RESULTS

Appearance	Cases	(%)
Good	35	(87.5)
Acceptable	4	(10)
Poor	1	( 2.5)

**TABLE VII**  
**BREAST CANCER - SURGERY & RADIATION**  
**U OF L - BROWN CANCER CENTER**  
**1977-1984**

#### COMPLICATIONS OF RADIATION THERAPY

	Cases (%)
Skin Reaction	30 (75)
Pulmonary	2 ( 5)
None	8 (20)

conservative surgery and irradiation. With proper collaboration with the surgeon, radiation oncologist, medical oncologist, and pathologist, an optimal treatment with breast preservation is possible in early breast cancer. The psychological and social benefits in these patients who have breast preservation are being studied more closely.

### Acknowledgment

We wish to acknowledge with appreciation the help of Mary Ellen McClure, Administrative Secretary, for her assistance in the preparation of the manuscript.



TABLE VIII  
BREAST CANCER - SURGERY & RADIATION  
U OF L - BROWN CANCER CENTER  
1977-1984

## FOLLOW UP AND CURRENT STATUS

Number	Date of Treatment	Follow Up Months	Status
1	3/77	106	NED
2	3/81	52	NED
3	4/81	59	NED
4	4/81	53	NED
5	7/81	39	(Local Recurrence, Re-excised) NED
6	10/81	54	NED
7	6/82	38	NED
8	8/82	36	NED
9	12/82	36	NED
10	12/82	39	NED
11	12/82	36	NED
12	2/83	38	NED
13	7/83	30	NED
14	8/83	32	NED
15	9/83	32	NED
16	9/83	26	NED
17	10/83	30	NED
18	10/83	30	NED
19	11/83	27	NED
20	1/84	25	NED
21	2/84	24	NED
22	2/84	22	NED
23	3/84	26	NED
24	3/84	24	NED
25	4/84	23	NED
26	5/84	21	NED
27	5/84	21	NED
28	5/84	24	NED
29	7/84	23	(Metastasis to liver) Breast- No Recurrence
30	7/84	26	NED
31	8/84	20	NED
32	8/84	18	NED
33	9/84	12	NED
34	9/84	18	NED
35	9/84	20	NED
36	9/84	16	NED
37	10/84	14	NED
38	11/84	20	NED
39	11/84	18	NED
40	11/84	20	NED

**References** 1. Amalric R, Santamaria F, Rober F, Seigle J, Altschuler C, Kurtz JM, Spitalier JM, Brandore H, Ayme Y, Pollet JF, Burmeister R, Abed R: Radiation therapy with or without primary limited surgery for operable breast cancer. A 20 year experience at the Marseilles Cancer Institute. *Cancer* 49:30—34, 1982. 2. Balawajdere I, Antich PP, Boland J: The management of breast carcinoma by primary radiotherapy at Mount Sinai Hospital from 1962-1979. *Cancer* 49:1587—1596, 1982. 3. Bedwinek JM, Perez CA, Kramer S, Brady L, Goodman R, Grundy G: Irradiation as the primary management of stage I and II adenocarcinoma of the breast. Analysis of the RTOG breast registry. *Cancer Clin Trials* 3:11—18, 1980. 4. Bonadonna G, Valagusso P, Rossi A, Zucali R, Tancini G, Bajetta E, Brambilla C, DeLena M, DeFronzo G, Banfi A, Rilke F, Veronesi U: Are surgical adjuvant trials altering the course of breast cancer. *Semin Oncol* 5:450—464, 1978. 5. Clark RM, Wilkinson RH, Mahoney LJ, Reid JG, MacDonald WD: Breast Cancer: A 21 year experience with conservative surgery and radiation. *Int J Radiat Oncol Biol Phys* 8:967—975, 1975. 6. Clarke D, Martinez A, Cox RS: Analysis of cosmetic results and complications in stage I and II breast cancer treated by biopsy and irradiation. *Int J Radiat Oncol Biol Phys* 9:1807—1813, 1983. 7. Chu AM, Cope O, Russo R, Wang CC, Schultz MD, Wang C, Rodkey G: Treatment of early stage breast cancer by limited surgery and radical irradiation. *Int J Radiat Oncol Biol Phys* 6:25—30, 1980. 8. Danoff BF, Pajak TF, Solin LJ, Goodman: Excisional biopsy, axillary node dissection and definitive radiotherapy for stage I and II breast cancer. *Int J Radiat Oncol Biol Phys* 11:479—483, 1985. 9. Manual for Stage of Cancer, 2nd edition. Philadelphia, J. B. Lippincott Co, 1983, pp. 127—134. 10. Hellman S, Harris JR, Levine MB: Radiation therapy of early carcinoma of the breast without mastectomy. *Cancer* 46:988—994, 1980. 11. Kurtz JM, Spitalier J, Amalric R: Late breast recurrence after lumpectomy

and irradiation. *Int J Radiat Oncol Biol Phys* 9:1191—1194, 1983. 12. Leslie NT, Harris JR, Hellman S: The current status of primary radiation therapy in the treatment of early breast cancer. *Breast Cancer Res Treat* 2:213—220, 1982. 13. Fisher B, Bauer M, Margolea R et al: Five year results of a randomized clinical trial comparing total mastectomy and segmental mastectomy with or without radiation in the treatment of breast cancer. *NEJM* 312:665—673, 1985. 14. Ray GR, Fish VJ, Lee RH, Marzoni FA, Trollope ML, Hews M, Gribble M: Biopsy and definitive radiation therapy in stage I and II carcinoma of the female breast. *Int J Radiat Oncol Biol Phys* 9:23—38, 1983. 15. Romsdahl MM, Montague ED, Ames FC, Richards PC, Schell SR: Conservation surgery and irradiation as treatment for early breast cancer. *Arch Surg* 118:521—528, 1983. 16. Rose CM, Botnick LE, Weinstein M, Harris JR, Koufman C, Silen W, Hellman S: Axillary sampling in the definitive treatment of breast cancer by radiation therapy and lumpectomy. *Int J Radiat Oncol Biol Phys* 9:339—344, 1983. 17. Sarrazin D, Le M, Fontaine F, Arriagada R: Conservative treatment versus mastectomy in T<sub>1</sub> or small T<sub>2</sub> breast cancer. A randomized clinical trial. In *Conservative Management of Breast Cancer*, Harris JR, Hellman S, Silen W (Eds). Philadelphia, JB Lippincott Co, 1983, pp 101—111. 18. Spitalier JM: A 20 year experience at the Marseilles Cancer Institute on conservative management for operable breast cancer. In *Alternatives to Mastectomy*, Harris JR, Hellman S, Silen W (Eds). Philadelphia, JB Lippincott Co, 1983, pp 15—21. 19. Veronesi U, Saccozzi R, DelVecchio M, Banfi A, Clements C, DeLena M, Gallus G, Greco M, Luini A, Maruloini E, Muscolino G, Rilke F, Salvatore B, Zecchini A, Zucali R: Comparing radical mastectomy with quadrantectomy, axillary dissection and radiotherapy in patients with small cancers of the breast. *NEJM* 305:6—11, 1981.

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# Diffuse Hemorrhage of the Breast Caused by Underlying Carcinoma of the Breast: A Case Report

W.L. Miller, MD and A.L. Armstrong, MD

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*A case is presented of a female patient who experienced diffuse ecchymosis and bleeding within the breast caused by an occult carcinoma of the breast. The patient had no preceeding history of trauma to the breast and had no evidence on testing of any bleeding diathasis. The tumor showed a dual pattern of infiltrating ductal and intraductal papillary adenocarcinoma with the latter component showing erosion of an enlarged duct with hematoma formation and being responsible for the subsequent dissecting hemorrhage throughout the breast tissue. No similar association nor clinical presentation of breast cancer can be found in the current literature. The authors caution physicians to take care to clarify any lump of the breast through appropriate biopsy and histological examination rather than assuming it to be traumatic or benign.*

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*From the Depts. of Pathology & Surgery, Muhlenberg Community Hospital, Greenville, KY.*

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Recently we encountered a 70-year-old white female who presented to the emergency room complaining of rather severe bruising of her right breast. She had no other areas of bruising and denied any history of prior breast problems, masses, trauma or anticoagulation therapy.

On physical examination she had a large area of ecchymosis of the right breast involving primarily the upper outer quadrant, but extending across the midline into the upper inner quadrant (Fig. 1). A 2.0 cm mass was also palpable in the upper outer quadrant involving the Tail of Spence. She had no palpable axillary lymph nodes and subsequent bone scan, chem studies, etc., suggested no evidence of metastasis.

She was admitted, biopsied with frozen section diagnosis, and had an immediate modified radical mastectomy performed. Pathological examination of the specimens revealed a confluent, dual pattern adenocarcinoma of the breast with overall diameter greater than 2.0 cm and showing a central hematoma formation within an area of intraductal papillary adenocarcinoma growth (Fig. 2). The tumor at this point had eroded the wall into periductal vessels causing hemorrhage, intraductal hematoma formation and diffuse dissecting hemorrhage throughout the surrounding breast tissue, and terminating in the surface skin ecchymosis. Adjacent to the pattern of fairly well differentiated papillary adenocarcinoma, was an equally prominent pattern of infiltrating ductal carcinoma (Fig. 3, 4 & 5).

Further microscopic examination showed local perineural lymphatic permeation. However, examination of 17 recovered axillary lymph nodes were negative for metastases. The nipple was negative for Paget changes and the lactiferous ducts contained no tumor. The re-



Fig. 1: Ecchymosis of right breast.



Fig. 2: Right breast biopsy: tumor and hematoma.

maining breast was mostly fatty and showed no additional foci of tumor.

### Discussion

Breast bleeding from the nipple in Paget's Disease or intraductal papilloma is well known. By search of the literature, we have been unable to find a single case report of carcinoma of the breast causing diffuse parenchymal hemorrhage of the breast. Stephens *et al*<sup>1</sup> reported on one patient with breast bleeding but this was bleeding from a huge fungating carcinoma with metastases. Similarly, Haagensen<sup>2</sup> discusses cases of more usual type, namely nipple bleeding associated with underlying carcinoma, and specifically depicts one case of a 54-year-old woman who had been struck in the breast by a ball, developed an area of skin ecchymosis and was noted to have an underlying lump, the subsequent carcinoma being coincidental to the bleeding but not causing it.

Our contention, from study of the present case, is that the cancer eroded a blood vessel, probably a small artery, near or in the duct wall, causing local hematoma formation and subsequent diffuse breast hemorrhage. The appearance of the skin bruising brought the patient to medical attention and may very well have saved her from inoperable carcinoma. The Surgeon here (A.L.A.) wisely did not assume the lump to be due to fat necrosis nor hemorrhage but proceeded forthwith with the biopsy.



Fig. 3: Right breast; parenchymal hemorrhage.



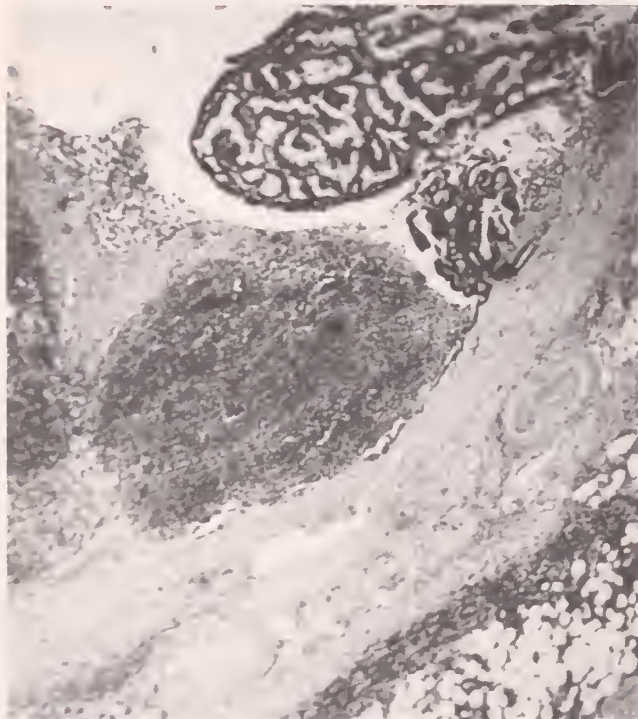


Fig. 4: Right breast; intraductal hematoma H and E stain 40 ×

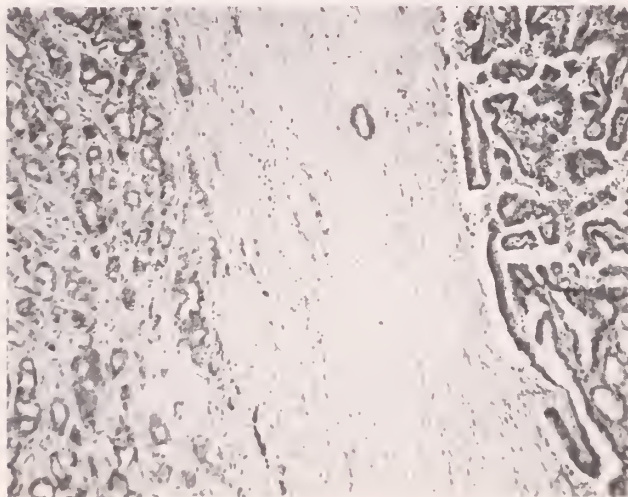


Fig. 5: Dual pattern adenocarcinoma Ductal (left); Papillary (right) H and E 100 ×

Finally, our patient had normal bleeding profile studies, normal liver function, and was taking no anticoagulation medications.

**References** 1. Stephens FO, Crea P, Harker G, Roberts BA, and C Hamby: 1980 Intra-Arterial Chemotherapy as Basal Treatment in Advanced and Fungating Primary Breast Cancer. *The Lancet* 2 (8192): 2. Haagensen CD: 1980. *Diseases of the Breast* (2nd Ed.). W Saunders Co, Philadelphia pp 497.

# Compartment Syndromes and the Use of Fasciotomy

C. Matthew Brown, MD; Gary C. Vitale, MD;  
B. Mark Evers, MD; J. David Richardson, MD

A compartment syndrome may be defined as a condition in which increased tissue pressure within a closed osteofascial space compromises both the circulation and the function of the contents within that space.<sup>1</sup> The physician must be able to promptly recognize and adequately treat such a syndrome to prevent the irreversible sequelae of muscle necrosis and contracture. The technique of fasciotomy, when properly performed, is such a treatment, yet its indication and timing are a source of continuing debate.

The causes of compartment syndrome vary widely with the most common being limb injury. Approximately 45% of these injuries are due to fracture, and the majority occur in the lower extremities. The etiology of this syndrome is simply an increase in compartmental content or a decrease in compartmental size. Edema from the ischemic process (such as arterial embolization or a vascular injury), limb compression, thermal injury, exertion, venous disease, or snakebite and hemorrhage may increase compartmental contents. Decreased compartmental size may result from a severe crush injury or constrictive dressings or casts.<sup>2</sup>

## Clinical Manifestations

The clinical findings of a compartment syndrome are subjective and depend greatly on the ability of the patient to cooperate and respond. The first and most important symptom in a conscious patient is pain out of proportion to what would be anticipated from the clinical setting.<sup>3</sup> The first signs of a compartment syndrome are swelling and a palpably tense muscle compartment; the most reliable early physical finding, however, is a sensory deficit in the nerve distribution running through

the particular compartment (Fig. 1).<sup>4</sup> The first sign of nerve ischemia is altered sensation, which is manifested first by paresthesias, then hypoesthesia, and finally anesthesia. Nerve ischemia is clinically apparent with routine neurological testing, particularly decreased two-point discrimination, if there is no central or peripheral nerve deficit present due to the limb trauma. Additionally, the sensory deficit is indicative of the involved compartment. Muscle weakness is a late sign.<sup>3</sup> Symptoms are often unreliable because patients may be unconscious, intubated or have other injuries that cloud the clinical presentation.

Rollins and co-workers<sup>5</sup> studied 45 patients who underwent a total of 48 fasciotomies and found spontaneous pain to be the most common clinical finding (83%). Swelling over the involved compartment was present in 70%, pain on passive flexion/extension of the foot in 52%, pulse deficit in 42%, paresthesias in 42%, and foot or toe paresis or paralysis in 36%. Apart from a major arterial injury or disease, distal pulses and capillary filling are not useful diagnostic criteria since compartmental pressure is rarely high enough to occlude major arteries. It is, however, capable of occluding small vessels within the compartment leading to muscle and nerve ischemia.<sup>4</sup>

## Management

The key to management of a compartment syndrome is early recognition of the patients at risk and a high level of clinical suspicion. Frequent examinations to include sensory, motor, passive stretch and palpation of individual compartments along with pulse evaluation and laboratory data are imperative. If clinically indicated, decompression should be performed. If prompt, adequate fasciotomy does not elicit expected improvement, one must consider another compartment syndrome, incorrect diagnosis, or secondary arterial occlusion. The possible complications of a myoglobi-

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*From the Department of Surgery, University of Louisville, Louisville, Kentucky.*

*Reprint requests to Gary C. Vitale, MD, Department of Surgery, University of Louisville, Louisville, KY 40292.*

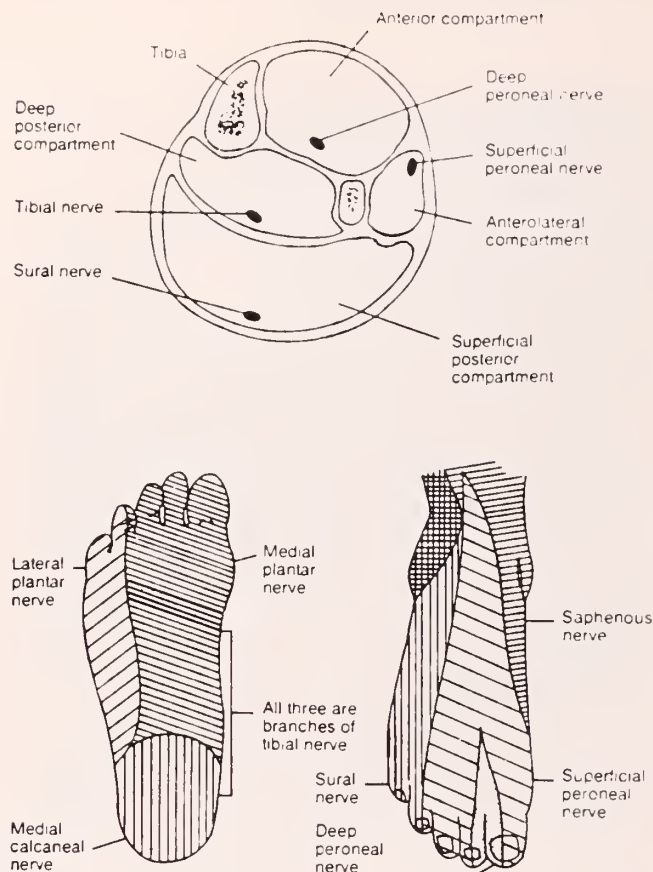
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## Indications for Fasciotomy

The primary indication of fasciotomy is the presence of the previously mentioned characteristic clinical signs and symptoms of compartment syndrome (Table 1). The broad variety of clinical situations, which may lead to compartment syndrome, necessitates stricter guidelines. With arterial embolization, decompression is often used following embolectomy and is indicated with progressive swelling, neuromuscular impairment, or loss of peripheral pulse. Relative indicators after arterial injury include several hours delay between injury and flow restoration, a long period of hypotension, preoperative or intraoperative massive swelling, combined arteriovenous injury, crush injury, failure of the repair, or a ligation of the vessel. Under these circumstances, a fasciotomy should be considered at the time of the procedure. Finally, when arterial reconstruction procedures involve interruption of distal circulation for a prolonged period of time and limb salvage depends upon collateral blood flow, any swelling that may impede collateral flow should prompt a fasciotomy.<sup>4</sup>

Other authors<sup>7</sup> suggest absolute and relative indications for fasciotomy. Absolute indications include: 1) clinical signs of an acute compartment syndrome with obvious motor/sensory deficits; 2) tissue pressures greater than 35 mmHg in conscious or unconscious patients; and 3) interrupted arterial circulation for greater than four hours. His relative indications include circumferential extremity burns, muscle overuse syndrome, and the crush syndrome. Rollins *et al*<sup>5</sup> analyzed 48 fasciotomies performed for conventional indications. A decompression was performed prophylactically after hospital admission or arterial repair in 27 patients and was delayed until the appearance of clinical signs and symptoms as previously discussed in the 21 others. There was no appreciable difference observed. Myoneural degeneration occurred only with massive trauma or when obvious signs of the compartment syndrome were ignored and the fasciotomy delayed. Here the timing of fasciotomy was felt to be best determined by careful attention to clinical findings and meticulous monitoring of the patient. The measurement of tissue pressure has failed to elicit a critical threshold pressure, and its usefulness appears to be as an adjunct to clinical judgment in particular situations.



**Fig. 1.** Cross-section of leg (a) and autonomous zones of sensation for peroneal, sural, and tibial nerves (b). (Adapted from Mubarak SJ, Hargens AR: *Compartment syndromes and Volkmann's contracture*. Philadelphia: W.B. Saunders, 1981, p 38.)

nuria and renal failure should be avoided by proper hydration and careful monitoring. Shah *et al*<sup>6</sup> described the use of intravenous hypertonic mannitol for the prevention of the compartment syndrome, especially in patients with acute arterial ischemia. They cited a low incidence of the syndrome in patients who received mannitol six to 24 hours postoperatively. More data are required concerning such treatment before it is implemented; we have had no experience with this method. There has also been a wave of interest in the use of "free radical scavengers" to prevent the toxic effects of oxygen-free radicals but such treatment has not come into widespread clinical use at this time.

TABLE 1

## SIGNS AND SYMPTOMS OF COMPARTMENT SYNDROME

	Early Fasciotomy (%)	Delayed Fasciotomy (%)	Total (%)
Pain	23(85)	17(81)	40(83)
Turgid swelling	14(52)	20(95)	34(70)
Pain dorsiflexion, plantarflexion	15(55)	10(48)	25(52)
Hypoperfusion, pulse loss	17(62)	3(14)	20(42)
Hypesthesia, paresthesia	16(59)	4(19)	20(42)
Paralysis, paresis	12(44)	5(24)	17(36)
None	1(4)	0	1(2)

TABLE 2

## INCIDENCE OF FASCIOTOMY IN VARIOUS CLINICAL SITUATIONS

Type of Injury	Total No. of Patients	No. of Patients Undergoing Fasciotomy	Percentage
Peripheral emboli	200	4	2
Arterial injuries	352	113	32
Venous injuries	51	7	14
Venous gangrene	9	6	67
Massive soft-tissue injury	68	13	19
Replantation of extremity	1	1	100
Wringer injury of arm	56	3	5
Anterior tibial compartment syndrome	5	4	80*

\*One patient with chronic form of the syndrome refused surgery.

### Measurement of Compartment Pressure

It seems logical that direct measurement of compartmental pressure would be diagnostic of a compartment syndrome. Several authors have advocated varying tissue pressures as indication for fasciotomy. A critical threshold pressure for all individuals has not been agreed upon. Normal intracompartmental pressure ranges from 0–10 mmHg. Whitesides and associates<sup>8</sup> demonstrated that when the tissue pressure rises to within 10–30 mmHg of the patient's diastolic blood pressure, the microcirculatory blood flow was markedly diminished or even halted. Matsen *et al*<sup>9</sup> reported a tissue pressure of 45–55 mmHg for a cessation of capillary circulation. In addition to the level of tissue pressure, duration of the compartment syndrome appears to be of concern. Hargens and co-workers<sup>10</sup> showed a threshold pressure of 30 mmHg for a duration of eight hours caused significant muscle necrosis in a normotensive patient.

Tissue pressure measurement seems to be most useful in a certain subset of patients in which typical signs and symptoms are compromised. These patients are unresponsive, unreliable (such as children), or suffering from central or peripheral nerve deficits.<sup>3</sup> The addition of a measured compartment pressure appears to be a valuable adjunctive tool for diagnosis whenever clinical criteria are inconclusive.

Several techniques of pressure measurement are available. Whitesides *et al*<sup>8</sup> developed an apparatus constructed of simple components, including a central venous pressure manometer, intravenous tubing, stop-

cock, syringe, 18-gauge needle and sterile saline solution. Although the technique requires some practice, results are apparently reproducible and the equipment is quite accessible. Its ultimate advantage is objectivity in an often confusing clinical situation.

### Techniques of Fasciotomy

The goal of fasciotomy is to decompress swollen osteofascial compartments and increase the marginal circulation to adequately maintain viability (Table 2). Several techniques are available, including single-incision lateral four-compartment fasciotomy, fasciotomy/fibulectomy, multiple-incision fasciotomy, and fasciotomy through limited skin incision. The latter technique is advocated by Patman and associates<sup>11</sup> due to its cosmesis, decreased risk of infection and lesser complications with the use of anticoagulants. Two or three short vertical incisions are made in the skin, and the investing fascia is incised over the entire length of the lower leg. Matsen *et al*<sup>9</sup> argues against such a technique due to inability to assure complete fascial decompression and the possibility of a secondary compartmental syndrome. We have not been satisfied with the technique using limited skin incisions when the operation discloses bulging muscles.

The single-incision lateral four-compartment fasciotomy without fibulectomy as described by Rollins and co-workers<sup>5</sup> has the obvious advantage of a single incision. Briefly, a long lateral incision is made over the



## GRAND ROUNDS

fibula from the fibular neck to just above the lateral malleolus. The lateral compartment is incised decompressing the peroneal muscles. The anterior skin is retracted and the anterior compartment opened, with care being taken to avoid the superficial peroneal nerve. Next, the posterior skin is retracted and the superficial posterior compartment incised. Then finally, the soleal attachments to the fibula are divided and the deep posterior compartment is opened, with attention to avoiding the posterior tibial and peroneal vessels. The double incision technique of Mubarak and Owen<sup>12</sup> utilizes an anterior incision to decompress the anterior and peroneal compartments and a second incision at the posteromedial border of the tibia to decompress both posterior compartments. Finally, the technique of fasciotomy with fibulectomy is not necessary for most clinical situations but does have a place for severe compromise of deep posterior compartment muscular function, distal popliteal artery injury where repair may be facilitated, and severe muscle ischemia encountered in the anterior or posterior compartments.<sup>11</sup> It is contraindicated in children and in compartment syndrome secondary to tibial fractures.

### University of Louisville Experience

At the University of Louisville Hospital from 1976 to 1983,<sup>13</sup> 84 patients underwent 95 fasciotomies for traumatic upper and lower extremity injuries. There were 22 patients with major vascular injuries, 26 with crushed injuries, nine with a combination major vascular and crush injury, and 26 with other traumatic causes of compartment syndrome (eg, gunshot wound without vascular injury, IV drug abuse/extravasation, electrical burns).

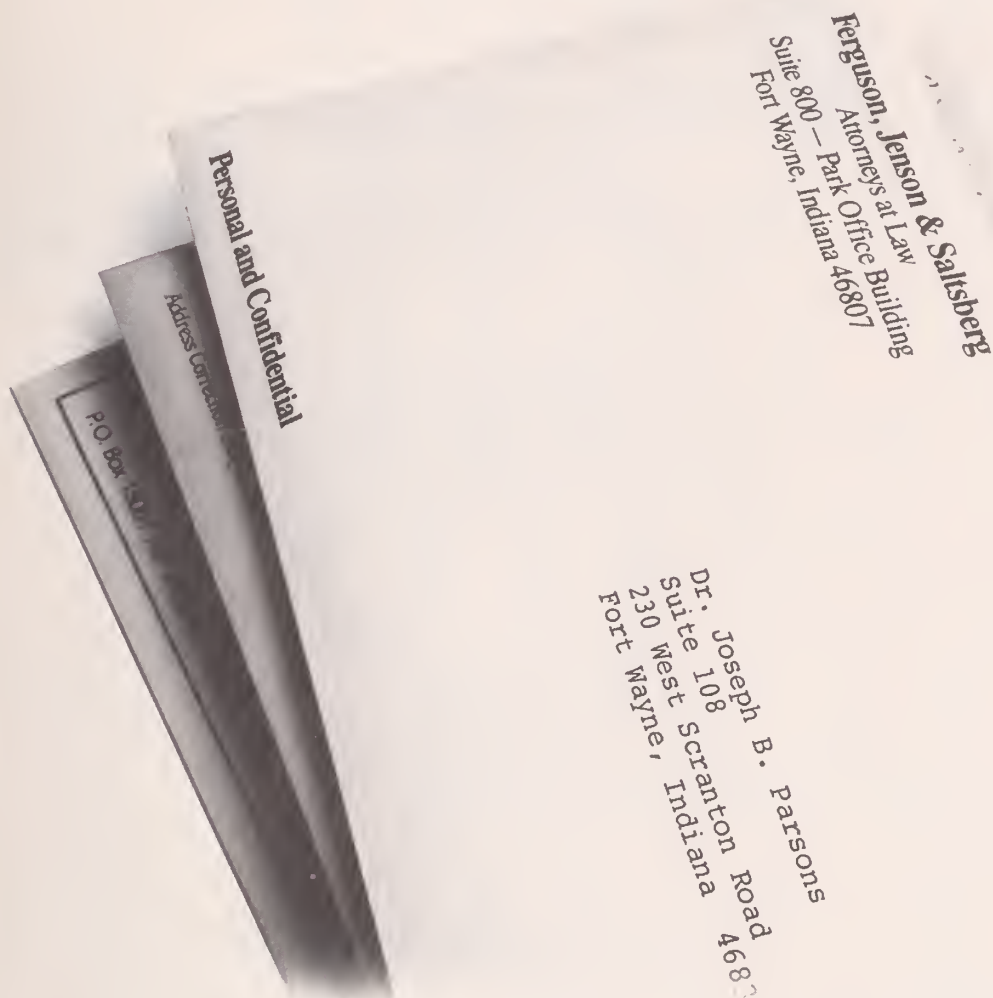
Among these patients, 69 had a good outcome, two developed chronic osteomyelitis, nine required amputations, and five died. The causes of amputation were either early arterial graft failure or severe crush injury with soft-tissue loss. There was one patient with a late graft infection five months following a severe upper extremity crush and major vascular injury. The fasciotomy did not appear etiologically related to limb loss in any of the patients.

Long-term follow-up has revealed that pain, weakness, and paresthesia are the prime causes of disability after severe extremity trauma. Fasciotomy contributes very little to long-term morbidity in these patients and can be considered a safe adjunctive measure in limb salvage.

In summary, for optimal limb salvage, compartment syndromes must be immediately recognized and effectively decompressed by proper fasciotomy. Of paramount importance is identification of high-risk patients, a high level of clinical suspicion, and close bedside monitoring for early clinical manifestations. Even though precise indications for fasciotomy are not readily apparent, utilization of the parameters as stated above may significantly improve future results.

**References** 1. Sheridan GW, Matsen FA: Fasciotomy in the treatment of the acute compartment syndrome. *J Bone Joint Surg* 58A:112-115, 1976. 2. Hayden JW: Compartment syndromes, early recognition and treatment. *Postgrad Med* 74:191-202, 1983. 3. Mubarak SJ: A practical approach to compartment syndromes, part II: diagnosis. Instructors Course and Lecture 32:92-102, 1983. 4. Patman RD: Fasciotomy indications and technique. In Rutherford (RB)ed: *Vascular Surgery*. 2nd ed. Philadelphia:W.B. Saunders, 1984, pp 513-523. 5. Rollins DL, Bernhard VM, Towne JB: Fasciotomy: an appraisal of controversial issues. *Arch Surg* 116:1474-1481, 1981. 6. Buchbinder D, Karmody AM, Leather RP, Shah DM: Hypertonic mannitol, its use in the prevention of revascularization syndromes after acute arterial ischemia. *Arch Surg* 16:414-421, 1981. 7. Rorabeck CH: Practical approach to compartment syndromes, Part III: Management. Instructors Course and Lecture 32:102-113, 1983. 8. Mubarak SJ, Owen CA: Compartment syndrome and its relation to the crush syndrome: spectrum of disease. *Clin Orthop* 113:81-89, 1975. 9. Whitesides TE Jr, Haney TC, Morimoto K, Harada H: Tissue pressure measurements as a determinant for the need of fasciotomy. *Clin Orthop* 113:43-51, 1978. 10. Matsen SA, Winquist RA, Krugmire RB: Diagnosis and management of compartment syndromes. *J Bone Joint Surg* 62A:286-291, 1980. 11. Hargans AR, Schmidt DA, Evans KL, et al: Quantitation of skeletal muscle necrosis in a model compartment syndrome. *J Bone Joint Surg* 63A:631-636, 1981. 12. Patman R, Thompson JE, Persson AV: Use and techniques of fasciotomy as an adjunct to limb salvage. *South Med J* 66:1108-1116, 1973. 13. Mubarak SJ, Owen CA: Double-incision fasciotomy of the leg for decompression of compartment syndromes. *J Bone Joint Surg* 59A:184-187, 1970. 14. Vitale GC, Richardson JD, George SM Jr, Miller FB: Fasciotomy for severe, blunt and penetrating extremity trauma: long-term follow-up. *Surg Gynecol Obstet* (in press).

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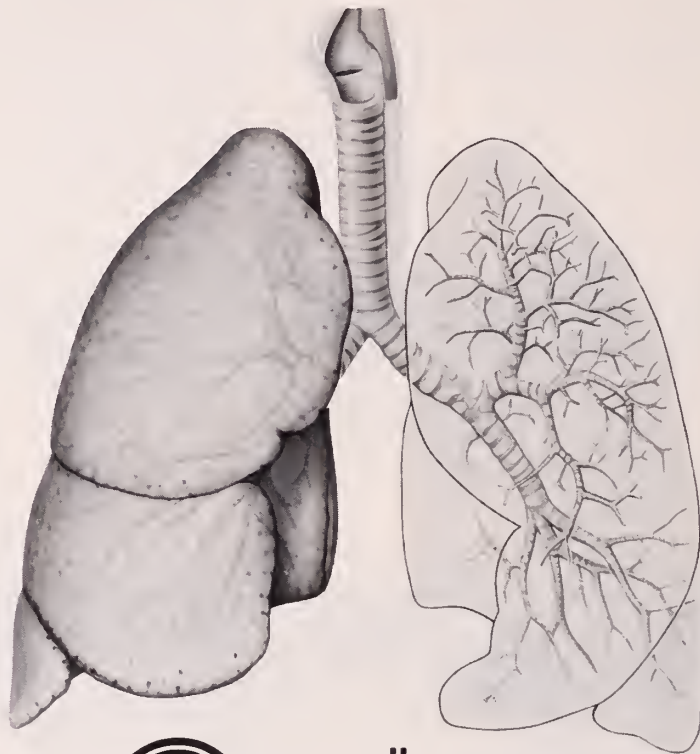
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Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

#### **Precautions:**

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

**Adverse Reactions:** (percentage of patients)  
Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness,

insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

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## New KMA President Barton Faces Major Issues

**D**onald C. Barton, MD, was simply following a family tradition in becoming a physician. With two uncles, an aunt, and three brothers as physicians, his choice of a profession came easily. He felt sure he wanted to become a physician and practice with his uncle, but the tragic death of his physician brother and his wife in an auto accident while Doctor Barton was in high school made his decision final—that, and working on the river bottoms in the hot sun in the summer. He had one goal in mind during medical school—to return to his hometown of Corbin and practice with his uncle. This, too, was family tradition. Two of his brothers practiced in Corbin and his oldest brother had been in practice just ten months in nearby Lancaster before his untimely death. Doctor Barton has always been happy with this decision and his choice of a career.

### A Legislative Year

Doctor Barton is facing a challenging year as the newly installed leader of KMA, one filled with many opportunities. He feels the Professional Liability Insurance campaign should continue to be the number one issue and looks forward to the challenges that will be presented when the Legislative Session convenes in January 1988.

"We, of course, are going after Constitution Reform, which primarily concerns Section 54 of the Kentucky Constitution. That is going to be our major platform—trying to do something with non-economic awards. I just can-



not see the 1988 Kentucky General Assembly coming up with some kind of alternate dispute system or resolution mechanism to solve our liability problems, even though this may be a long-range solution. We will have to promote the programs we have laid out. The public has become much more aware of not just medicine's liability problems, but all liability problems. Our polls reflect it. The public is concerned. They know they are paying the cost regardless of what kind of liability it is—whether it's professional, product, or whatever. They think something should be done and they are willing to help. I think it's up to us as professionals to encourage our patients and the public to help us in the Legislature. We are in a crisis. During the last Session, I don't think the General Assembly realized this. I think the doctors 'back home' stressed it to their legislators enough to make them aware of the crisis. We've got to

get this message from the grassroots to let individual legislators know this is a real crisis and the public is suffering from it, not just in cost, but also in access to care," he states.

Doctor Barton will be comfortable in the Legislative arena. He has always been very involved in his city's politics, having served in the City Council for six years and currently on the Industrial Commission. Enthusiasm and excitement fill his voice as he affirms, "I love politics. It's a great field. It's not nasty. It's fun. And it is rewarding." He encourages all physicians to become involved. "We are notorious for not being involved in the political arena. We should all know our representatives on a state and national level, as well as on a local level. We should develop lines of communication. If our political representatives don't know our views and don't know both sides of the issue, they can't represent us very well. We can't expect our representatives in Frankfort or Washington to know all the issues that come before them. They're not omnipotent. They try to listen to both sides and make an intelligent decision. And that is all we ask."

He continues with other areas of concern, "I'm afraid we are going to be facing legislation mandating Medicare assignment tied to licensure. That is a fear we hope never comes to realization, but it's happened in 15 other states, and we must be prepared for it. Also, we always have to work on membership. We have a good membership program, a fine committee that works hard, but

this is something that needs to be stressed continuously. We will be making a real effort in certain areas of the state where membership is low, and will concentrate on female physicians a little more. The only way we can remain strong is by engaging all of the state's physicians in our association. All physicians should be members because KMA is the spokesman for the profession and is looked upon as such. The number one thing we have to offer our membership is letting the public know what our profession stands for, that we are concerned, that we are trying to look after their best wishes, that we are indeed the patient's advocate."

### Patient Care Priority

Doctor Barton feels it is inherent to the profession to receive some criticism from various politicians and consumer groups who may believe that KMA and Kentucky physicians do not work in the public interest as they should.

"These are minority voices. I think most people in the state, in their locale, are aware that the physician does take care of the people there. KMA has operated Kentucky Physicians Care for 2½ years and this program has shown exactly what we expected—that most people are already being seen and are not suffering from access to care. The program is very successful; I compliment Doctor Russell Travis. Of course, it's stopgap and is not an answer to the indigent problem; it was not meant to be. As recommended to the House of Delegates, I do think we need to carry it through 1988 to see if we can get a more permanent solution in the 1988 Legislative Session.

"You know, we take a beating on Medicare and Medicaid—something like 55 to 60%—which in a lot of cases just covers expenses. So that's basically been subsidized for years, and, of course, we have our charity load. Ninety-five percent of the physicians in the state do

not turn patients away because of lack of money. I am sure there are a few bad apples out there, but that's true in any profession. KMA and Kentucky physicians are concerned that all of our residents have access to care."

His concern for patients is evident as he discusses the high cost of medical care. "I am not sure we are going to see the cost come down, but we may not see it accelerate as fast because of the competition out there. A lot of factors



go into the making of the cost of health care, and technology is by far one of the greatest. It has been such a boon to the public, and we do not want to see anything cut down the technology that has been developed for the care of our patients. We've got to stand up and look at all of the plans that are developed to assure the patients are being taken care of properly, regardless of cost. We're all aware of trying to hold down costs, but patient care comes first, not cost."

### Social Issues and Education

Doctor Barton is very concerned about major social issues affecting his home

state. He is a firm advocate of education in trying to solve some of these problems. "Teenage pregnancy is catastrophic in the state of Kentucky. We're number one among the fifty states in the area of teenage pregnancies—it's horrible. Sex education has to begin in elementary school. High school is too late. Our young people also need to be informed about AIDS, and these programs should be combined and should definitely begin in elementary school.

"KMA has just appointed a special committee that's developed an AIDS policy which has already been passed on to the state even though it has not yet been adopted by our House of Delegates. I feel sure they will go along with what we have done because it was developed by a group of fine colleagues in the field, and I think it is a good policy statement. As of July 22nd, there have been 84 AIDS cases in Kentucky; we're not talking epidemic proportions, but it will continue to grow. I think KMA is very timely with our policy proposal."

Another area in which he feels the public needs more education is in the use of ATVs (all-terrain vehicles). "We





are going to ask the House of Delegates to approve introduction of legislation for safety controls and public awareness of the dangers involved in the operation of ATVs."

### **A Personal Glimpse**

Doctor Barton is enthusiastic and optimistic about the future of medicine. He feels the young physicians just beginning practice should hear more of the good news. "After you have been out there a while and you've fought the battles, sometimes you get a little pessimistic, a little tired. But, gosh, the rewards are so much greater. And not just monetary rewards, but personal rewards. I think we should start stressing more of the good side of the story. True, it's a lot tougher starting a practice now than 25 years ago. Medicine has changed. There are a lot of tough decisions out there; corporate medicine is changing things—not just the old hometown doctor anymore; and all of this has to be taken into consideration. But, the number one priority remains

the same—you have to be the patient's advocate and love the patient and you'll do well. Medicine will continue to survive as the greatest profession there is."

As a graduate of the University of Louisville School of Medicine, Doctor Barton is looking forward to the School's Sesquicentennial Celebration. "My three brothers and I graduated from U of L Medical School, and I feel the Barton family probably holds the distinction of being the only one to have four brothers as graduates in their 150-year history."

Doctor Barton met his wife, Joan, when he was a student at U of L and she was attending Atherton High School. They have a son, David, and three daughters, Donna, Rebecca, and Toni Sue. Doctor Barton's face softens as he speaks of his seven grandchildren. "They are a lot easier to raise, and more fun, since I don't have to take care of them."

Even though he admits his many involvements sometimes make life hectic, Doctor Barton seems to be happy with the balance between his professional and private life. Along with the hard work,

he enjoys golfing in the summer and hunting in the winter. Maybe a lot of the happiness comes from the fact he considers many of his involvements "fun and enjoyment."

When Donald C. Barton, MD, reflects on his year as President of KMA, he will feel it was a success if he can say, "We found a solution that was worthwhile and workable to lower our liability rates and to, in turn, better serve our patients."

---

*D. Sue Tharp*

---

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### **LIBRIUM®**

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**Indications:** Management of anxiety disorders; short-term relief of anxiety symptoms, acute alcohol withdrawal symptoms, preoperative apprehension and anxiety. Usually not required for anxiety or tension associated with stress of everyday life. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms (including convulsions) reported after abrupt cessation of extended use of excessive doses are similar to those seen with barbiturates. Milder symptoms reported infrequently when continuous therapy is abruptly ended. Avoid abrupt discontinuation; gradually taper dosage.

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Due to isolated reports of exacerbation, use with caution in patients with porphyria.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. Oral—Adults: Mild and moderate anxiety disorders and symptoms, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

**Supplied:** Librium® (chlordiazepoxide HCl/Roche) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dase® packages of 100, available in boxes of 4 reverse-numbered cords of 25, and in boxes containing 10 strips of 10. Libritabs® (chlordiazepoxide/Roche) Tablets, 5 mg and 10 mg—bottles of 100 and 500; 25 mg—bottles of 100. With respect to clinical activity, capsules and tablets are indistinguishable.

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# The Way It Was

**I**t's interesting and a bit astonishing to reflect about the changes that have occurred since I first started seeing patients back in the third year of medical school. I am, of course, a relatively young man, just approaching the zenith of his professional career. That such astounding changes in the world of medicine and surgery could have taken place during such a short time is truly amazing. One could make an almost endless list of these changes, but I would like to present just a few illustrative examples:

1. There were no antibiotics. The only antimicrobial drugs were the sulfa drugs.
2. There was almost no specific treatment for hypertension. We prescribed phenobarbital and ammonium chloride in the MOD\*. Intravenous mercur-

rial diuretics (mercupurin and mercurhydrin) were used.

3. A two-bed hospital room cost \$12.50 per day when I started practice.
4. Malpractice insurance carried by almost all of us was \$25.00 per year.
5. There were no recovery rooms. Patients were taken from the operating room to the elevator and back to their rooms.
6. There were no ICUs or CCUs.
7. Each surgeon owned his own instruments and carried them from hospital to hospital.
8. There was no coffee, doughnuts, fruit, omelettes, etc., etc., in the hospital doctors' lounges.
9. There was no air conditioning.
10. There was no cardiac or peripheral arterial surgery, joint

replacements, fiberoptic endoscopy of any kind, radioisotope scans of any kind, CT scans, ultrasound, respirators, respiratory therapy, chemotherapy, etc., etc., ad infinitum.

11. There was virtually no health and accident insurance—no Blue Cross, Blue Shield, etc., etc.

I look at the young men in medical school and residencies today. Can it possibly be that when they reach my stage in life, they will look back and see such momentous changes? It is not only possible, but highly probable. It defies the imagination.

**McHenry S. Brewer, MD**

\*Medical Outpatient Department of the Louisville General Hospital



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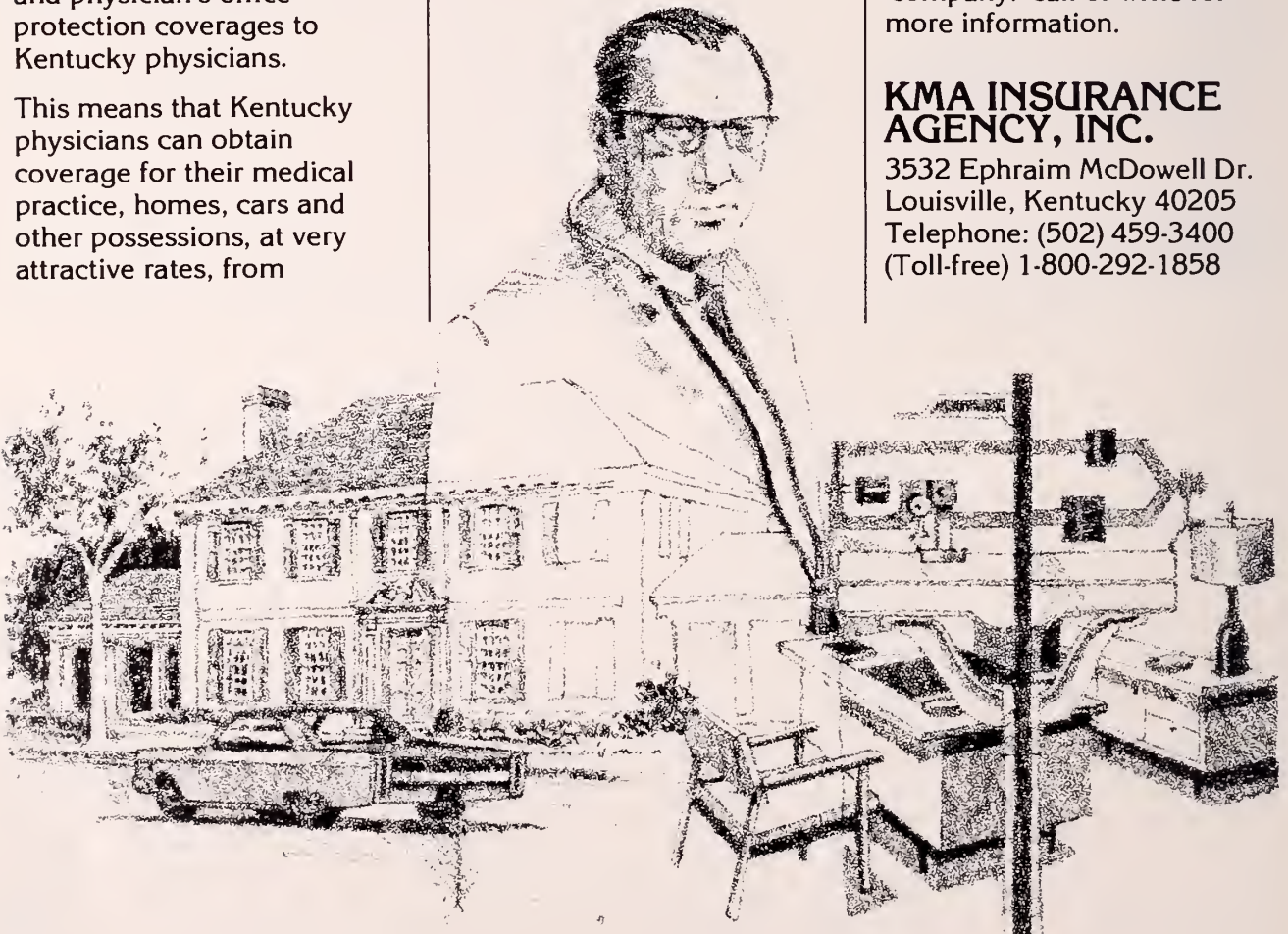
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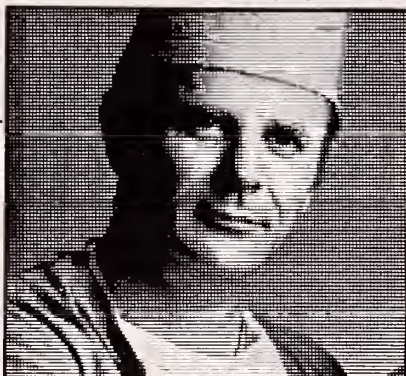
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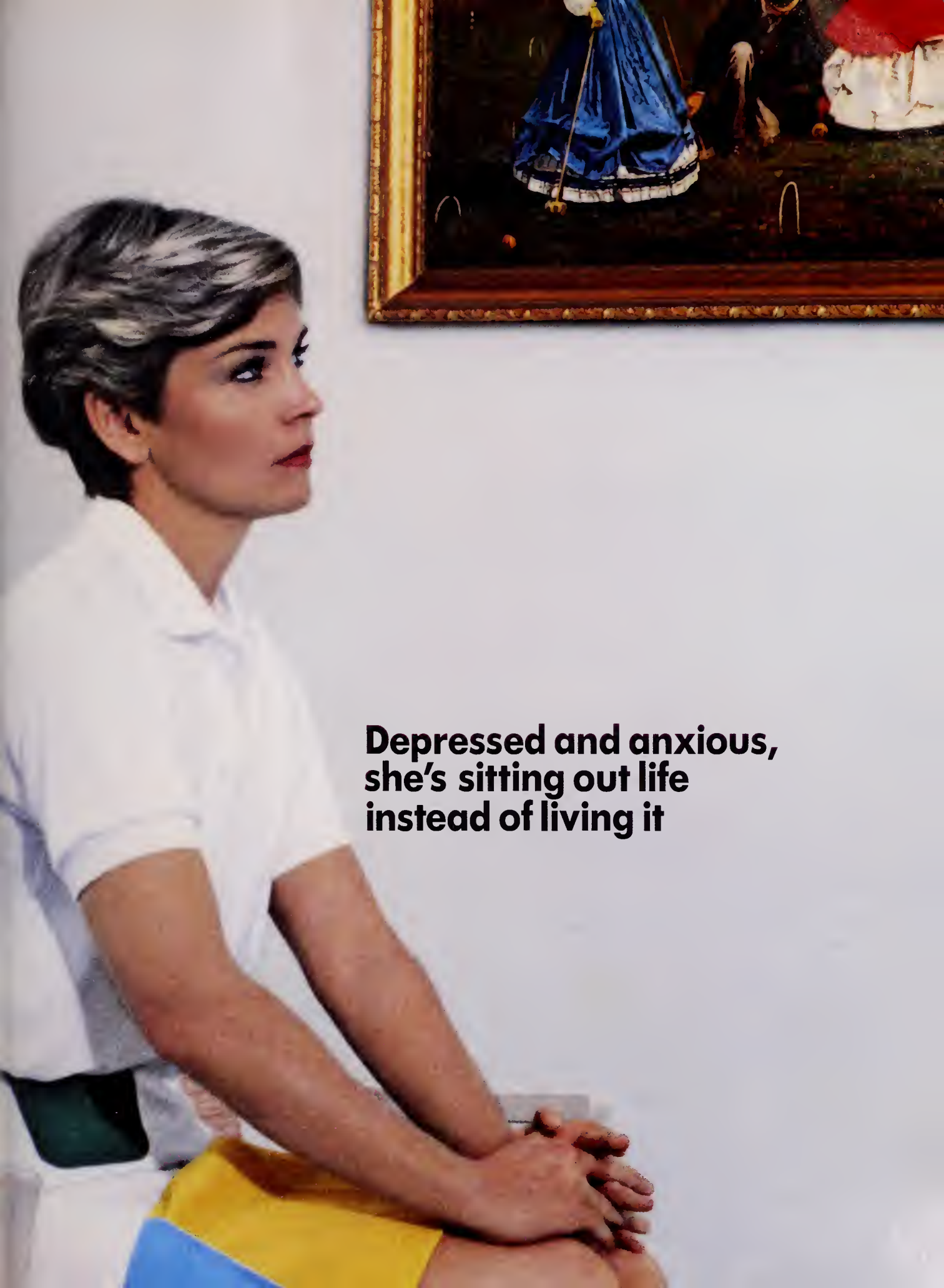
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**References:** 1. Feighner JP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 3. Dixon R, Cohen J: *J Clin Psychopharmacol* 3:107-109, Apr 1983

#### Limbitrol®

#### Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** Relief of moderate to severe depression associated with moderate to severe anxiety

**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

**Warnings:** Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

**Precautions:** Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

**Adverse Reactions:** Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs: Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Overdosage:** Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestations and treatment.

**Dosage:** Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly.

Limbitrol DS (double strength) Tablets, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol Tablets, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.



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### **Boyd**

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Stephen C. Payne, MD, Shepherdsville

### **Butler**

Rosalie Padilla, MD, Morgantown

### **Calloway**

Steven L. Trevathan, MD, Murray

### **Campbell**

Stephen L. Hensley, MD, Ft. Thomas

### **Clark**

Daniel Alan Ewen, MD, Winchester

### **Clinton**

Larry Scarborough, MD, Albany

### **Daviess**

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William C. Harrison, MD, Owensboro  
Joel B. McCuaig, MD, Owensboro  
Michael E. McGuinn, MD, Owensboro  
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Waitman B. Taylor, MD, Owensboro

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Philip F. Corbett, MD, Lexington  
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Lester J. Fahrner, MD, Lexington

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Ernest L. Fletcher, MD, Lexington

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## **New Physician Workshop Set for November 5-6**

KMA's sixth "How to Get Started in Medical Practice" Seminar will be held Thursday and Friday, November 5-6, at the KMA Headquarters Office in Louisville. The day-and-a-half workshop is designed for physicians seeking direction in establishing a medical practice and includes information on marketing techniques, financing, medical records, scheduling, personnel and collections. For registration information, contact Diane Maxey at the KMA Office.

## **More Practice Management Workshops Scheduled**

Because of the growing interest in KMA's practice management workshops, a fall series is being planned by the Membership Committee. Chairman Harold D. Haller, Sr., M.D., reported that over 150 physicians and office personnel attended the June workshops on "Third Party Reimbursement and Coding" presented by Conomikes Associates, Inc. Since a number of people are on a waiting list to attend, a third series, which will again be cosponsored by the Jefferson and Fayette County Medical Societies, has been scheduled as follows:

### **"How to Improve Third Party Reimbursement & Coding"**

Tuesday, November 3, 1987 — Lexington

Wednesday, November 4, 1987 — Louisville

9 a.m. to 4 p.m.

Registration for the workshop, which is limited to 55 participants, is \$155 per enrollee. A registration form may be requested by contacting the offices of KMA, JCMS or FCMS.

Before prescribing, see complete prescribing information in SK&F CO. literature or PDR. The following is a brief summary.

**\* WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

**Precautions:** The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin (ACTH)). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

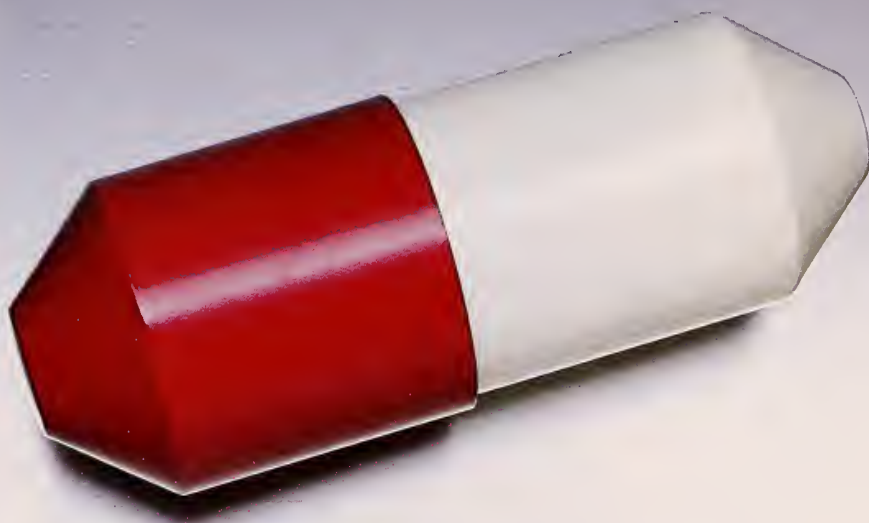
**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonia and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

**Supplied:** 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

BRS-DZ:L42

# In Hypertension\*... When You Need to Conserve K<sup>+</sup> Remember the Unique Red and White Capsule: Your Assurance of SK&F Quality

Serum K<sup>+</sup> and BUN should be checked periodically (see Warnings and Precautions)



## Potassium-Sparing

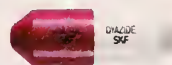
# DYAZIDE®

25 mg Hydrochlorothiazide/50 mg Triamterene/SKF

## Over 20 Years of Confidence

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The unique  
red and white  
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# and PREMARIN<sup>®</sup>



**Proven benefits beyond relief  
of vasomotor symptoms**

**No other estrogen proven  
effective for osteoporosis**

Only conjugated estrogens tablets have established efficacy in both osteoporosis<sup>1</sup> and vasomotor symptoms\* at 0.625 mg/day. No other estrogen, oral or transdermal, has established clinical evidence or minimum effective dose in both indications.

**No estrogen proven safer**

PREMARIN is the most extensively tested estrogen, with an unsurpassed record of long-term safety.

And clinical evidence shows a significantly reduced risk of endometrial hyperplasia when cycled with a progestin.<sup>2</sup>

**PREMARIN<sup>®</sup>**  
(conjugated estrogens tablets)

**Most trusted for more reasons**

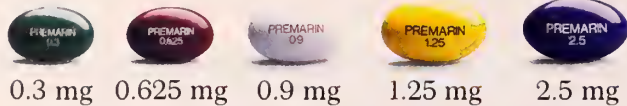
\*PREMARIN is indicated for moderate-to-severe vasomotor symptoms

Please see following page for brief summary  
of prescribing information.



For moderate-to-severe  
vasomotor symptoms and  
for osteoporosis

## PREMARIN® (conjugated estrogens tablets)



The appearance of these tablets is a trademark of Ayerst Laboratories.

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS)

**PREMARIN® Brand of conjugated estrogens tablets, USP**

**PREMARIN® Brand of conjugated estrogens Vaginal Cream, in a nonliquefying base**

### 1 ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA

Three independent, case-controlled studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case-controlled studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semi-annual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equi-estrogenic doses.

### 2 ESTROGENS SHOULD NOT BE USED DURING PREGNANCY

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a nonsteroidal estrogen, have an increased risk of developing, in later life, a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb-reduction defects. One case-controlled study estimated a 4.7-fold increased risk of limb-reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb-reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well-controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

**DESCRIPTION:** PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17 $\alpha$ -dihydroequilin, together with smaller amounts of 17 $\alpha$ -estradiol, equilin, and 17 $\alpha$ -dihydroequilin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

**INDICATIONS AND USAGE:** PREMARIN (conjugated estrogens tablets, USP) Moderate-to-severe vasomotor symptoms associated with the menopause (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) Osteoporosis (abnormally low bone mass) Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae.

PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

**Concomitant Progestin Use:** The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

**CONTRAINDICATIONS:** Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (see Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

**WARNINGS:** Estrogens have been reported to increase the risk of endometrial carcinoma (see Boxed Warning). However, a recent large, case-controlled study indicated no increase in risk of breast cancer in postmenopausal women. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

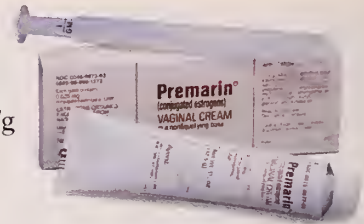
Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nontatal myocardial infarction, pulmonary embolism, and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

For atrophic vaginitis

## PREMARIN® (conjugated estrogens)

Vaginal  
Cream

0.625 mg/g



Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

**PRECAUTIONS:** Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention, such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Pre-existing uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not yet complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen.

- Increased subfibrinolytic retention.
- Increased prothrombin and factors VII, VIII, IX, and X, decreased antithrombin 3, increased norepinephrine-induced platelet aggregability.
- Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI,  $T_4$  by column, or  $T_4$  by radioimmunoassay. Free  $T_3$  resin uptake is decreased, reflecting the elevated TBG, free  $T_4$  concentration is unaltered.
- Impaired glucose tolerance.
- Decreased pregnandiol excretion.
- Reduced response to methylparathion test.
- Reduced serum folate concentration.
- Increased serum triglyceride and phospholipid concentration.

As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

Long-term, continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. However, in a recent, large case-controlled study of postmenopausal women there was no increase in risk of breast cancer with use of conjugated estrogens.

**ADVERSE REACTIONS:** The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow, dysmenorrhea, premenstrual-like syndrome, amenorrhea during and after treatment, increase in size of uterine fibromyomata, vaginal candidiasis, change in cervical erosion and in degree of cervical secretion, cystitis-like syndrome, tenderness, enlargement, secretion (of breasts), nausea, vomiting, abdominal cramps, bloating, cholestatic jaundice, chloasma or melasma which may persist when drug is discontinued, erythema multiforme, erythema nodosum, hemorrhagic eruption, loss of scalp hair, hirsutism, steepening of corneal curvature, intolerance to contact lenses, headache, migraine, dizziness, mental depression, chorea, increase or decrease in weight, reduced carbohydrate tolerance, aggravation of porphyria, edema, changes in libido.

**ACUTE OVERDOSAGE:** May cause nausea, and withdrawal bleeding may occur in females.

### DOSEAGE AND ADMINISTRATION:

**PREMARIN® Brand of conjugated estrogens tablets, USP**

1. *Given cyclically for short-term use only.* For treatment of moderate-to-severe vasomotor symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 mg to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically.* Osteoporosis: Female castration. Osteoporosis — 0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off). Female castration — 1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control.

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

**PREMARIN® Brand of conjugated estrogens Vaginal Cream**

*Given cyclically for short-term use only.* For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three- to six-month intervals.

Usual dosage range, 2 g to 4 g daily, intravaginally depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

### References:

- Lindsay R, Hart DM, Clark DM. The minimum effective dose of estrogen for prevention of postmenopausal bone loss. *Obstet Gynecol* 1984;63:759-763.
- Studd JWW, Thom MH, Paterson MEL, et al. The prevention and treatment of endometrial pathology in postmenopausal women receiving exogenous estrogens. In Paoletti N, Ambrosi JL (eds). *The Menopause and Postmenopause*. Lancaster, England: MTP Press Ltd, 1980, chap 13.

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- Sleep improvement in 74% of patients after first h.s. dose<sup>2</sup>
- Significantly faster relief—62% of total four-week improvement evident in first week versus 44% with amitriptyline alone<sup>1</sup>
- Dramatic first-week reduction in somatic complaints<sup>2</sup>

## % Reduction in Somatic Symptoms<sup>2</sup>

Vomiting	Nausea	Headache	Anorexia	Constipation
Reduced 90%	Reduced 86%	Reduced 72%	Reduced 62%	Reduced 60%

- Only 1/3 the dropout rate due to side effects of amitriptyline alone, although the incidence of side effects is similar<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.


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## In moderate depression and anxiety

# Limbitrol<sup>®</sup>

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) 

# Limbitrol DS<sup>®</sup>

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) 

References: 1. Feighner JP, et al. *Psychopharmacology* 61:217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

### Limbitrol<sup>®</sup> Tranquizer—Antidepressant

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Relief of moderate to severe depression associated with moderate to severe anxiety.

**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

**Warnings:** Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

**Precautions:** Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

**Adverse Reactions:** Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring

reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

**Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

**Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

**Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

**Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

**Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

**Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

**Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

**Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

**Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Overdosage:** Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**Dosage:** Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol DS (double strength) Tablets, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol Tablets, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500, Tel-E-Dose<sup>®</sup> packages of 100, Prescription Paks of 50.



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depression  
and anxiety**

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## Limbitrol<sup>®</sup> DS

Each tablet contains 10 mg clordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) 

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Please see summary of product information on adjacent page.

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November 1987

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### The Cover:

Photo of George Gershwin was a gift to Morton L. Kasdan, MD, which he wished to share in commemoration on the 50th anniversary of the composer's death. See article on page 649.

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## Times, They Are Changing, or Are They!

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*Donald C. Barton, MD, presented this Inaugural Address at his installation as the 137th President of the Kentucky Medical Association on September 16, 1987.*

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**I**n our professional lives, we seem to be living from one crisis situation to another. There's professional liability costs; the federal and state government interfering with our practices; new regulations every month; and next year it will probably be something else. When we get together, all we talk about are MA, PA, DRGs, IPAs, PROs, or any other group of initials you can put together.

I think we all need to take the time to reflect on what a wonderful profession we are privileged to be practicing. Entirely too much of the time our profession appears to be filled with gloom and doom. We need to reflect and remember the *fundamental ethic* that led us to a career in medicine in the first place—*caring for people*.

The past great leaders of our profession have left us a great legacy. I *fear* that we are becoming lax when we are teaching our medical

students and our younger colleagues what our profession is all about. We don't treat consumers! Governments don't treat patients! Doctors treat patients. Medicine is not practiced for governments, insurance companies, HMOs, or for that matter, for doctors. Medicine is practiced for people.

Professionally, as well as personally, we have to think of people in terms of the individual rather than the mass. The past 20 years have brought forth undreamed-of medical advances. However, these advances have contributed to the clinical isolation that I fear. We must teach that the individual lying in the bed with tubes and needles sticking from every orifice is our friend and patient, not just another case.

*Caring* also means that we must be patient advocates. We are the protectors of the public health. We must not stand impotently by and allow government or anyone else to interfere with the quality of care for the American people. We must leave no doubt that our profession will permit no undue compromises in the quality and availability of care for our patients, their freedom of choice, or the

independence of physicians to practice medicine the best way they know how, without giving up medical decision making to distant payors. Our commitment will give a clear signal to the public that we *do* care about them.

Our professional image has always ranked first with the public and still does, but I fear this image is slipping. We must make sure that every patient relationship is based on honesty, compassion, concern, and good medical care. If we make sure that our own interests are secondary when we are faced with a patient's problem and do right by our patients, then our image will prosper. Then, and only then will we be able to solve the problems our profession faces, including professional liability.

Ours is the greatest profession, and our legacy to the people must be the kind of medicine that assures them of better health and longer life for their todays as well as their tomorrows.

On behalf of my family and myself, I thank you for the opportunity to serve you this coming year.

**Donald C. Barton, MD**  
**KMA President**



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### BRIEF SUMMARY

#### CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

#### PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

**Drug Interactions:** Animal studies have shown that the simultaneous administration of CARAFATE with tetracycline, phenytoin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. The clinical significance of these animal studies is yet to be defined.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** No evidence of drug-related tumorigenicity was found in chronic oral toxicity studies of 24 months' duration conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies have not been conducted.

**Pregnancy:** Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

**Pediatric Use:** Safety and effectiveness in children have not been established.

#### ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients, adverse effects were reported in 121 (4.7%). Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

#### DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.


While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

#### HOW SUPPLIED

CARAFATE (sucralfate) 1-gm pink tablets are supplied in bottles of 100 and in Unit Dose Identification Paks of 100. The tablets are embossed with MARION/1712. Issued 3/84

#### References:

1. Grossman MI, in *Scand J Gastroenterol* 58 (suppl 15):7-16, 1980.
2. Marks IN, in Hellemans J, Vantrappen G (eds): *Gastrointestinal Tract Disorders in the Elderly* Edinburgh, Churchill Livingstone, 70-81, 1984.
3. Krentz K, Jablonowski H, in Hellemans J, Vantrappen G (eds): *Gastrointestinal Tract Disorders in the Elderly* Edinburgh, Churchill Livingstone, 62-69, 1984.

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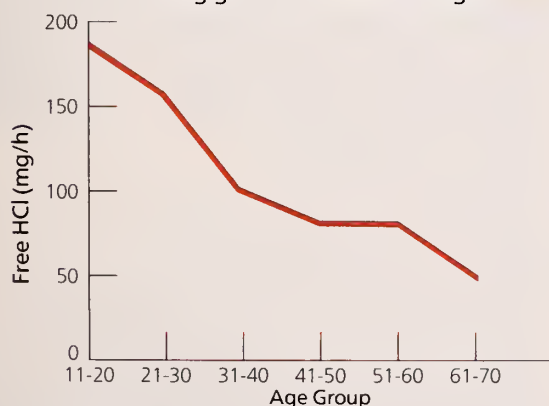
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# When advancing age signals reduced acid secretion



If your duodenal ulcer patient is over 55, decreased mucosal resistance is more likely to cause an ulcer than hypersecretion of acid-pepsin.<sup>1</sup> A tendency toward lower acid secretion with advancing age has been shown.<sup>2,3</sup>

Declining gastric secretion and age<sup>3</sup>



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Please see adjoining page for references and brief summary of prescribing information.

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**No estrogen proven safer**

PREMARIN is the most extensively tested estrogen, with an unsurpassed record of long-term safety.

And clinical evidence shows a significantly reduced risk of endometrial hyperplasia when cycled with a progestin.<sup>2</sup>

**PREMARIN<sup>®</sup>**  
(conjugated estrogens tablets)

**Most trusted for more reasons**

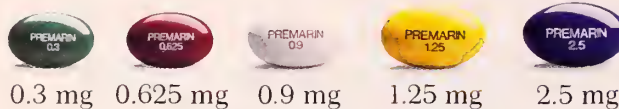
\*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

Please see following page for brief summary  
of prescribing information.



For moderate-to-severe  
vasomotor symptoms and  
for osteoporosis

## PREMARIN® (conjugated estrogens tablets)



The appearance of these tablets is a trademark of Ayerst Laboratories.

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION SEE PACKAGE CIRCULARS)

**PREMARIN® Brand of conjugated estrogens tablets, USP**  
**PREMARIN® Brand of conjugated estrogens Vaginal Cream, in a nonliquetizing base**

### 1 ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA

Three independent, case-controlled studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case-controlled studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semi-annual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration, it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equi-estrogenic doses.

### 2 ESTROGENS SHOULD NOT BE USED DURING PREGNANCY

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a nonsteroidal estrogen, have an increased risk of developing, in later life, a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb-reduction defects. One case-controlled study estimated a 4-7 fold increased risk of limb-reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb-reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well-controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

**DESCRIPTION:** PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mare's urine. It contains estrone, equilin, and 17 $\alpha$ -dihydroequilin, together with smaller amounts of 17 $\alpha$ -estradiol, equilin, and 17 $\alpha$ -dihydroequilin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

**INDICATIONS AND USAGE:** PREMARIN (conjugated estrogens tablets, USP) Moderate-to-severe vasomotor symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) Osteoporosis (abnormally low bone mass). Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae.

PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

**Concomitant Progestin Use:** The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens (See PRECAUTIONS). The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

**CONTRAINDICATIONS:** Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (see Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

**WARNINGS:** Estrogens have been reported to increase the risk of endometrial carcinoma (see Boxed Warning). However, a recent large, case-controlled study indicated no increase in risk of breast cancer in postmenopausal women. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement, it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism, and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

For atrophic vaginitis

## PREMARIN® (conjugated estrogens)

Vaginal  
Cream

0.625 mg/g



Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

**PRECAUTIONS:** Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention, such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Pre-existing uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not yet complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

- Increased sulfolobomorphine retention
- Increased prothrombin and factors VII, VIII, IX, and X, decreased antithrombin 3, increased norepinephrine-induced platelet aggregability

- Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI,  $T_4$  by column, or  $T_4$  by radioimmunoassay. Free  $T_3$  resin uptake is decreased, reflecting the elevated TBG. Free  $T_4$  concentration is unaltered.

- Impaired glucose tolerance
- Decreased pregnandiol excretion
- Reduced response to metopropolol test
- Reduced serum folate concentration
- Increased serum triglyceride and phospholipid concentration

As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

Long-term, continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. However, in a recent, large case-controlled study of postmenopausal women there was no increase in risk of breast cancer with use of conjugated estrogens.

**ADVERSE REACTIONS:** The following have been reported with estrogenic therapy including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow, dysmenorrhea, premenstrual-like syndrome, amenorrhea during and after treatment, increase in size of uterine fibromyomata, vaginal candidiasis, change in cervical erosion and in degree of cervical secretion, cystitis-like syndrome, tenderness, enlargement, secretion (of breasts), nausea, vomiting, abdominal cramps, bloating, cholestatic jaundice, chloasma or melasma which may persist when drug is discontinued, erythema multiforme, erythema nodosum, hemorrhagic eruption, loss of scalp hair, hirsutism, steepening of corneal curvature, intolerance to contact lenses, headache, migraine, dizziness, mental depression, chorea, increase or decrease in weight, reduced carbohydrate tolerance, aggravation of porphyria, edema, changes in libido.

**ACUTE OVERDOSSAGE:** May cause nausea, and withdrawal bleeding may occur in females.

### DOSSAGE AND ADMINISTRATION:

**PREMARIN® Brand of conjugated estrogens tablets, USP**

1. *Given cyclically for short-term use only.* For treatment of moderate-to-severe vasomotor symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 mg to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically.* Osteoporosis. Female castration. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off). Female castration—1.25 mg daily cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control.

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

**PREMARIN® Brand of conjugated estrogens Vaginal Cream**

*Given cyclically for short-term use only.* For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three- to six-month intervals.

Usual dosage range 2 g to 4 g daily, intravaginally depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

### References:

- Lindsay R, Hart DM, Clark OM. The minimum effective dose of estrogen for prevention of postmenopausal bone loss. *Obstet Gynecol* 1984;63:759-763.
- Studd JWW, Thom MH, Paterson MEL, et al. The prevention and treatment of endometrial pathology in postmenopausal women receiving exogenous estrogens. In Pasetto N, Paoletti R, Ambrus JL (eds). *The Menopause and Postmenopause*. Lancaster, England: MTP Press Ltd, 1980, chap 13.

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# The Final Days of George Gershwin, American Composer September 26, 1898–July 11, 1937 50th Anniversary

Morton L. Kasdan, MD

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*Composer George Gershwin died at the age of 38 from a malignant brain tumor. His illness covered approximately one month. This year is the 50th anniversary of his death. Today, the diagnosis would have been made earlier, but the prognosis would be no different.*

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July 11, 1987 marked the 50th anniversary of the death of George Gershwin, one of America's most influential composers (Fig 1). Gershwin was well known for his musical comedy scores when he wrote "Rhapsody in Blue" in 1924. The "Rhapsody" was followed by "An American in Paris" in 1928, and "Porgy and Bess" in 1935.

Gershwin was a charismatic man with an enthusiasm for living. He was physically fit, yet paradoxically suffered attacks of nausea and chronic constipation; what he often referred to as his "composer's stomach." Although he had affairs with many beautiful women, he never married and often questioned whether marriage was a wise choice for an artist.<sup>1</sup>

## Symptomatology

The first indications of Gershwin's illness were not readily discernible. Always an extrovert, he began in 1936 to suffer periods of loneliness and despondency. Personal disappointments and the death of a friend in December 1936 further increased his melancholy. He became irritable and overly sensitive about things which



Fig 1: George Gershwin (Courtesy Bettmann Archive).

before he would have discounted as unimportant. He worried about losing his hair and purchased a refrigerator-sized machine with a cap for the scalp. This produced a suction to which he submitted himself for 30 minutes a day. He hoped in this way to improve the growth of hair on his head.<sup>2,3</sup>

He was famous and wealthy, but the periods of depression grew. His doctors, finding nothing physically wrong, related his emotional condition to a temporary case of "nerves."<sup>2,3</sup>

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Physical symptoms of a serious illness were more noticeable on February 11, 1937. Gershwin lost consciousness for 10 to 20 seconds while performing his "Concerto in F" with the Los Angeles Symphony Orchestra.<sup>2</sup> While unconscious, he experienced an olfactory hallucination which he described later as smelling like burned rubber. He quickly recovered and continued the performance with few aware of the incident. He again suffered a temporary blackout and the sensation of smelling burned rubber in April. Headaches, which were initially dismissed as being psychosomatic, began in June. Gershwin felt they were a result of exhaustion and overwork. Dr Ernst Simmel, a psychoanalyst in Los Angeles, was consulted. He felt that Gershwin's illness was organic in nature and referred him to Dr Gabriel Segall, an internist.<sup>4,5,6,7</sup>

The first consultation with Dr Segall took place June 9, 1937. Gershwin's presenting complaints were headaches and dizzy spells. The episodes of headaches were usually in the early morning hours. The dizzy spells were about 30 seconds in duration and associated with olfactory hallucinations. These symptoms developed at least once daily, often in situations involving stress. No abnormalities were found on physical examination.<sup>6,7</sup>

During June, it became increasingly apparent to George Gershwin's family and friends that something was seriously wrong. He was listless and lacked his normal vitality. He often awakened confused and was increasingly irritable.<sup>4,6,8</sup> The headaches, confined to the frontal and temporal regions, were described as intense.<sup>9</sup> Repeated examinations by Dr Segall still failed to reveal any abnormalities. Dr Eugene Ziskind was called in for a neurological consultation, but his initial evaluation revealed little. On June 23rd, Gershwin was admitted to Cedars of Lebanon Hospital for a complete physical checkup and additional testing. While there, x-rays of the skull and blood tests were obtained. Nothing of importance was revealed by these tests, nor was anything found in an ocular fundi or perimetric study.<sup>7,9</sup> The last notation on his record upon discharge, June 26, 1937, was "most likely hysteria." The possibility of a brain tumor had been considered, but Gershwin was anxious to return to work and refused a spinal tap.<sup>6,7,9,10</sup>

Upon his release, a male nurse was hired. For a while he appeared to improve. Then his condition began to deteriorate. His behavior was sometimes irrational, he began to lose his equilibrium, and to suffer losses of hand coordination.<sup>6,7,11,12</sup>

Friday, July 9, 1937, a month after consulting Dr Segal, Gershwin fell into a coma. He was rushed to Cedars of Lebanon and was admitted by Dr Segall and Dr Carl W. Rand, a neurosurgeon.<sup>6</sup>

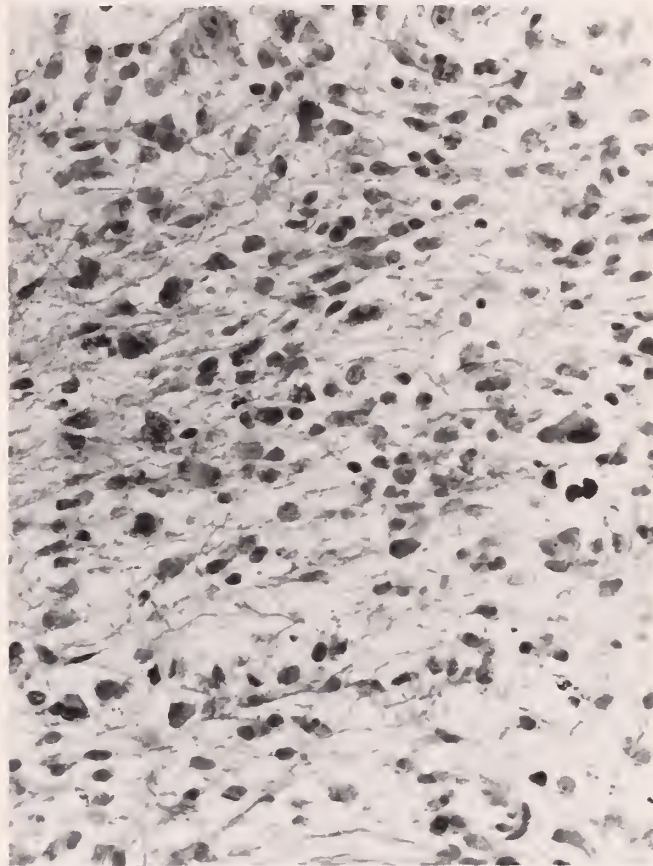
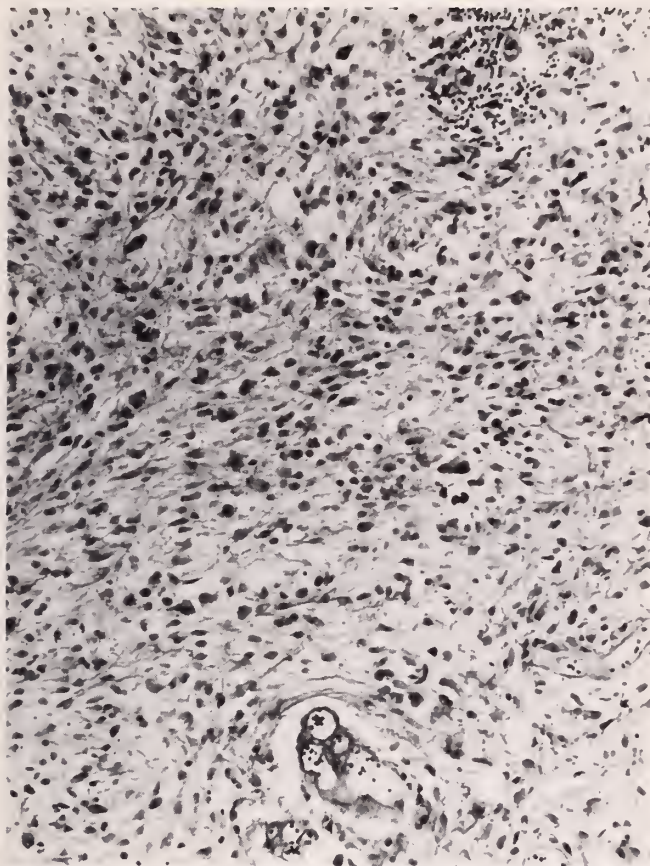
### **Diagnosis and Surgery**

Examination revealed papilledema with severe protrusion and a left-sided hemiparesis. Dr Rand noted "he could not be aroused even by supraorbital pressure."<sup>7</sup> A spinal tap at 3 PM on July 10 showed a pressure of 500 mm;<sup>7</sup> 6 cc of clear, colorless spinal fluid revealed 30 mgs of protein and one cell. Urinalysis and blood count were normal, blood sugar was 108.<sup>6,7</sup> The diagnosis was a brain tumor, thought to be malignant because of its rapid fulmination.<sup>6,7,13</sup>

An additional consultation was suggested by Dr Rand and an attempt to contact Dr Walter E. Dandy, professor of neurosurgery at Johns Hopkins was initiated. Dr Dandy was vacationing aboard a private yacht somewhere on Chesapeake Bay. In desperation, George Pal lay, a close friend of Gershwin's, contacted the White House and requested help in finding Dr Dandy. Two Navy destroyers were dispatched to try to locate the yacht. When found, Dr Dandy was taken aboard one of the destroyers and brought ashore; a motorcycle escort took him to Cumberland, Maryland. From there, he flew to Newark where a private plane waited to transport him to Los Angeles.<sup>2,13</sup>

In the meantime, attempts were also made to locate Dr Howard Nafziger, professor of neurosurgery at the University of California Medical School. Dr Nafziger was contacted at Lake Tahoe and quickly flew to Los Angeles. He arrived at the hospital around 9:30 PM on July 10. Upon examination, he found Gershwin's condition critical and recommended immediate surgery. Dr Dandy was notified at Newark Airport, where he was waiting to board a plane en route to California. He was advised of the urgency of the situation in a three-way telephone conversation with the doctors at Cedars and concurred in the decision that immediate surgery was imperative.<sup>6,7,13,14</sup> He remained in Newark, but kept in touch with the proceedings via an open phone line.<sup>14</sup>

A ventriculogram to locate the exact position of the tumor was begun at 10:30 PM. This air contrast study was developed by Dr Dandy in 1918,<sup>15</sup> and revealed the ventricles and most abnormalities in size and position that might exist. The tumor was judged to be in the right temporal lobe. Gershwin was taken to the operating theater at 3 AM. Dr Rand, with Drs Nafziger,



Figures 2 and 3: Photomicrographs of the Gershwin glioma. It is a high grade astrocytoma or glioblastoma multiforme. (Courtesy Nathan B. Freidman, MD, Senior Consultant, Department of Pathology, Cedars-Sinai Medical Center, Los Angeles, CA)

Segall, and Ziskind attending, performed the surgery.<sup>6,7,14,15</sup>

A right cranial flap was turned down revealing severely stressed dura. What appeared to be a gliomatous tumor lay beneath the dura. An ounce of dark yellow fluid was obtained on aspiration. The cyst was opened, a mural nodule on the medial side was removed by an electric loop, and the cyst treated with fulguration.<sup>6</sup> The operation lasted approximately four hours. Gershwin never regained consciousness and died several hours later, on July 11, 1937, at 10:35 AM.<sup>6,7,16,17</sup> The pathology report of a segment of cerebral cortex and pieces of cystic tumor indicated a spongioblastoma multiforme [Fig 2 and 3].<sup>2,6,7</sup> Referred to as gliomas in current terminology, they are probably one of the most malignant of all human neoplasms having a median survival span of less than one year.<sup>18</sup>

When apprised of this report, Dr Dandy wrote Dr Segall: "I do not see what more you could have done for Mr. Gershwin. It was just one of those fulminating tumors. There are not many tumors that have uncinate attacks that are removable, and it would be my impres-

sion that although the tumor in large part might have been extirpated and he would have recovered for a little while, it would have recurred very quickly, since the whole thing fulminated so suddenly at the onset. I think the outcome is much the best for himself, for a man as brilliant as he with a recurring tumor would have been terrible; it would have been a slow death."<sup>6,7,17</sup>

#### Fifty Years Later

In retrospect and in light of the final diagnosis, it is interesting to note a theory of Dr Bengt Ljunggren, Department of Neurosurgery of the University Hospital in Lund, Sweden. He speculated that Gershwin's "composer's stomach" may have been a result of an "initially low-grade astrocytoma in the right temporal lobe that caused abortive temporal lobe seizures with a rising epigastric sensation. Then, in the final phase, this astrocytoma may have undergone rapid malignant degeneration and turned into a fulminating glioblastoma multiforme."<sup>2</sup>

It is believed cerebral gliomas develop long before clinical manifestations of their existence. Today, di-



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Fig 4: Copy of Pathology Log Entry on George Gershwin. (Courtesy of Dr Nathan Freidman)

agnosis of intracranial tumors can be made earlier and more accurately with the aid of high resolution computed tomographic (CT) scans. Still, it is unlikely the prognosis for George Gershwin would be very different. Earlier diagnosis and surgical removal may indeed have extended his life, but gliomas have an extremely high rate of recurrence, and life expectancy would probably still be measured in months.<sup>2,18</sup>

George Gershwin was 38 years old when he died. He was at the height of his creativity, with much he had hoped to accomplish left undone. His genius and musical instinct helped carve a place of respect for American music in the world of serious classics.

*Special acknowledgement and thanks are given to Mrs Frances Gershwin Godowsky (Mr Gershwin's sister); to Dr Nathan B. Friedman, Pathology Dept, Cedars-Sinai Medical Center, for his assistance in providing pathology information; and to Mr Edward Jablonski for his generosity in providing material for this article. I also want to thank my secretary, Mrs Bonnie Wood, for many hours of work on this paper.*

**References** 1. Ewen D: *George Gershwin: His Journey to Greatness*. Ungar Publishing, New York, pp 143-150, 1986. 2. Ljunggren B: The Case of George Gershwin. *Neurosurgery*, 10:733-736, 1982. 3. Jablonski E, Stewart LD: *The Gershwin years*. Doubleday, Garden City, New York, p 289, 1973. 4. Carp L: George Gershwin—Illustrious American Composer His Fatal Glioblastoma. *Am J Surg Pathol* 3(5):473-478, 1979. 5. Fabricant ND: George Gershwin's Fatal Headache. *Ear Eye Nose & Throat Monthly*, 37:322-334, 1958. 6. Wilkins RH: Historical Aspects of Neurosurgery. In Sabiston DC (Ed): *Textbook of Surgery*, WB Saunders Co, 1986, pp 1364-1365. 7. Kramer RS: Intercranial Tumors. In Sabiston DC (Ed): *Textbook of Surgery*, WB Saunders Co, 1986, pp 1371-1375. 8. Jablonski E, Stewart LD: Op cit p 289. 9. Jablonski E, Stewart LD: Op cit p 290. 10. Ewen D: Op cit p 280. 11. Ewen D: Op cit p 281. 12. Jablonski E, Stewart LD: Op cit p 292. 13. Ewen D: Op cit p 282. 14. Jablonski E, Stewart LD: Op cit p 295. 15. Wilkins RH: Historical Aspects of Neurosurgery. In Sabiston DC (Ed): *Textbook of Surgery*, WB Saunders Co, 1986, pp 1364-1365. 16. Ewen D: Op cit p 283. 17. Jablonski E, Stewart LD: Op cit p 296. 18. Kramer RS: Intercranial Tumors. In Sabiston DC (Ed): *Textbook of Surgery*, WB Saunders Co 1986, pp 1371-1375.

# Continuous Ambulatory Peritoneal Dialysis: A Five-Year Experience

R. Greg McMorrow, MD; Debbie S. Davis, RN;  
Richard W. Baehler, MD; Thomas W. Ferguson, MD

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*The five-year experience of 120 CAPD patients (176.8 patient years) was reviewed comparing outcomes and complications with those of the National CAPD Registry. At five years, 36.7% of the patients locally and 44.5% nationally continued to use CAPD. A higher proportion of the local population was transplanted and transferred to other CAPD programs. Transfer to hemodialysis was predominantly for recurrent peritonitis with both groups. No local patient required transfer for loss of fluid or biochemical control of uremia. Mortality rates were 20.1% nationally and 24.2% locally although only one local death was directly related to a CAPD complication. There was an 85% probability of leaving CAPD by five years but only a 47% probability of technique failure. The hospitalization rate was 1.78/patient-year but only 47% were dialysis related. Peritonitis rates were 1.1/patient-year locally and 1.4 nationally. Patients over 60 years of age had outcomes and complication rates similar to the total population and, thus, may not be "high risk" patients. Diabetics had a poorer experience at all levels of comparison.*

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*Nephrology Associates of Lexington and Dialysis Clinics, Inc, Lexington, KY. Reprint requests to Nephrology Associates of Lexington, 1517 Nicholasville Road, Lexington, KY 40503 (Dr McMorrow).*

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Although described clinically in 1923 by Ganter,<sup>1</sup> peritoneal dialysis was utilized almost exclusively for the treatment of acute renal failure until 1962 when Boen and his colleagues<sup>2</sup> reported their experience with intermittent peritoneal dialysis in the management of chronic renal failure. Even with the development of a safe chronic peritoneal catheter by Tenckhoff,<sup>3</sup> chronic peritoneal dialysis did not enjoy widespread popularity until the introduction of continuous ambulatory peritoneal dialysis (CAPD) by Popovich, Moncrief, and colleagues in 1976<sup>4</sup> and the modification of the technique utilizing plastic dialysate bags by Oreopoulos, et al<sup>5</sup> in 1978.

The purpose of this paper is to report the results of our five-year experience with CAPD and, where data are available, compare our results with the national experience as reported by the National CAPD Registry.<sup>6</sup>

## Demographics

From January 1, 1981, through December 31, 1985, our program trained 120 patients for CAPD. The total dialysis experience represented by these 120 patients was 64,546 patient days or 176.8 patient years. The average training time was 11.6 days and the mean time on CAPD was 1.5 years. Sixty-nine (57.5%) patients were male and 51 (42.5%) female which was comparable to the Registry distribution of 55.5% male and 44.5% female. The racial composition of our population was 111 (91.7%) white and 9 (8.3%) black, similar to the national trend of 76.2% white and 17.2% black. Our mean age was 49 years. Patients were evenly distributed among the third through sixth decades with 45.8% 20 to 50 years of age and 54.2% over 50 years of age. The Registry distribution was similar with 43.6%



and 56.4% respectively. The most common renal diseases in our population were primary glomerulonephritis—39 (32.5%); diabetic nephropathy—23 (19.2%); nephrosclerosis—17 (14.2%); and chronic interstitial nephritis—11 (9.2%). Diabetic nephropathy (23.1%) was most common in the Registry, followed by glomerulonephritis (19.6%), nephrosclerosis (15.3%), and chronic interstitial nephritis (7.5%). Sixty-two (51.6%) patients transferred to CAPD from incenter hemodialysis and 50 (41.8%) chose CAPD as their initial modality of treatment.

Diabetic patients and patients over 60 years of age have been considered high risk patients for dialysis treatment. Twenty-six (27.7%) of our patients were diabetic (three did not have diabetic nephropathy) and 32 (26.7%) were over 60 years of age. Separate data were collected for these groups to ascertain their degree of risk. Those patients over 60 years of age showed similar sex (53.1% male, 46.9% female) and racial (90.6% white, 9.4% black) distributions and similar duration of dialysis (mean time 1.5 years) compared to the total population. The diabetic group had more males (61.5%) and more whites (96.1%) and a shorter mean duration of treatment (1.0 year) than the total population.

### Outcome

As of January 1, 1986, 44 (36.7%) patients continued treatment with CAPD. The Registry indicated 44.5% of the national study group were currently treated with CAPD. However, 11 (9.2%) of our patients had transferred to other CAPD programs and 14 (11.6%) had received renal transplants. Only 3.9% and 8.2% respectively of the national group had transferred or had been transplanted.

Twenty-one (17.5%) patients transferred to hemodialysis compared to 19.6% nationally. The predominant reason for transfer in our program was recurrent peritonitis occurring in 15 (71.4%) patients. Nationally, the reasons for transfer were divided among recurrent peritonitis (31%), "other medical reasons" (25%), catheter complications (16%), and personal choice (13%). The disparity between national and local data may have been due to differences in the definitions of the reasons for transfer. Only two (9.5%) of our patients chose to return to hemodialysis for personal reasons and three (14.3%) returned after herniorrhaphy.

It is noteworthy that none of our patients required transfer to hemodialysis because of loss of fluid or bio-

chemical control of uremia. Registry data indicated that 9% of patients nationally transferred for these reasons.

Twenty-nine (24.2%) patients expired while on CAPD. The national mortality rate was 20.1%. Only one of our deaths (3.4%) was dialysis related, a case of sepsis from peritonitis. The remaining 28 deaths were not directly attributable to dialysis complications. The majority of our deaths (15 or 51.7%) were cardiac, occurring in patients known to have a stable dialysis course. Ten (34.5%) were sudden deaths at home and were presumed to be cardiac arrhythmias, four (13.8%) had documented acute myocardial infarctions, and one (3.4%) died from a chronic cardiomyopathy. Of the remaining 13 deaths, four (13.8%) patients voluntarily terminated dialysis, two each had pneumonia and non-peritonitis-related sepsis, and one each had ischemic bowel, cerebral hemorrhage, aortoiliac thrombosis, pancreatitis, and an overdose.

The outcome of the high risk groups showed both areas of similarity and disparity when compared to the entire population. The proportion of patients over 60 years of age (11/32 or 34.8%) and diabetics (9/26 or 35%) currently on CAPD were similar to the entire group (36.7%). As might be anticipated, the older group had a higher mortality rate (14/31 or 44%), but the death rate in the diabetic group (7/26 or 27%) was similar to the entire group (24.2%). Fewer older patients transferred to hemodialysis (3/32 or 9%) while transfer among the diabetic group (4/26 or 15%) was similar to the total population (17.5%). Transfer to another CAPD program occurred with equal frequency in the older, diabetic, and total groups (9%, 8%, and 9.2% respectively). None of the older patients were transplanted while three of the 26 diabetics (11%) received a transplant which was similar to the total group (11.6%).

Life table analyses were performed to determine the probability of leaving CAPD for any one of a variety of reasons. Figure 1 shows actuarial data depicting survival of the CAPD technique for the entire group as well as the high-risk groups. Technique failure was defined as leaving CAPD for reasons other than non-dialysis related death, transplantation, transfer to another CAPD program, or regaining renal function. One-, two-, and five-year survival rates for the technique in the entire population were 91%, 70.8%, and 53.1%. Similar data from the National Registry were available only to 3½ years. One- and two-year survival rates were 79.8% and 66.4% respectively. At 3½ years the national survival rate of 52.1% had already fallen

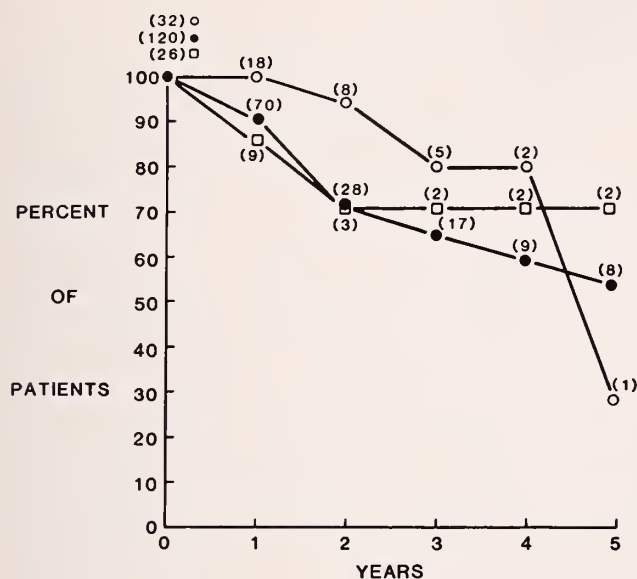


Fig 1: Probability of technique survival for all patients (●—●), patients over 60 years of age (○—○), and diabetic patients (□—□).

below our five-year rate. Technique survival rates for our older patients were 100%, 94.6%, and 26.5% at one, two and five years respectively. National survival rates for this group were 80.5% and 67.7% at one and two years. Diabetic technique survival rates in our group were 84.2%, 71.3%, and 71.3% compared to the national rates of 79.4%, 66.6%, and 57.2%.

Figure 2 shows the probabilities of leaving CAPD. The rates of attrition are most rapid during the first two years followed by a decline in the rate of loss thereafter. The probabilities of leaving CAPD by one, two, and five years due to transplantation or transfer to another CAPD program were 10.9%, 29.3%, and 40.3% respectively; due to transfer to hemodialysis were 9%, 29.2%, and 46.9% respectively; and due to death were 13.7%, 31.5%, and 44.5% respectively. The composite of these probabilities yielded probabilities of 31.1%, 66.4%, and 84.6% of leaving the program for any reason at one-, two-, and five-year intervals.

For patients over 60 years of age, the probabilities of leaving CAPD by one, two, and five years due to transfer to another CAPD program were 7.7%, 7.7%, and 20.9% respectively; due to transfer to hemodialysis were 0.0%, 7.4%, and 73.5% respectively; and due to death were 24.5%, 52.8%, and 59.6% respectively. The composite probabilities for this group were 33.3%, 61.6%, and 92% respectively.

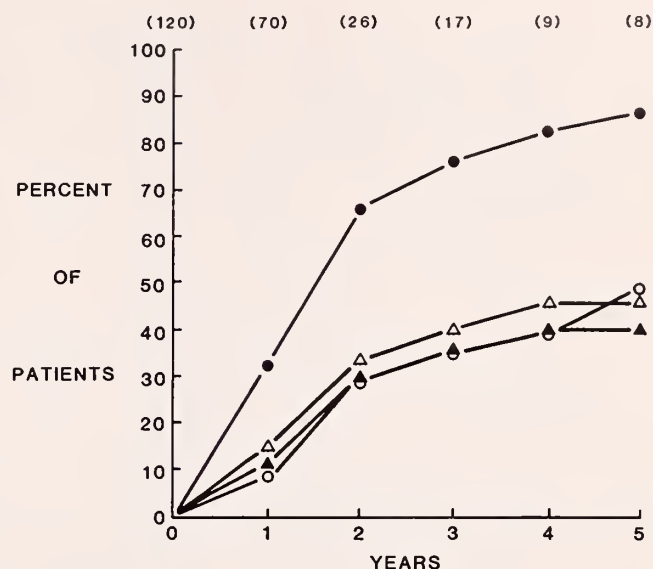


Fig 2: Probability of leaving CAPD for all reasons (●—●), transplantation or transfer to another CAPD program (▲—▲), transfer to hemodialysis (○—○), and death (△—△).

The probabilities of diabetic patients leaving CAPD at similar intervals were 15.8%, 39.8%, and 39.8% respectively due to transplantation or transfer to another CAPD program; 15.8%, 28.7%, and 28.7% respectively due to transfer to hemodialysis; and 25.5%, 38.5%, and 57.7% respectively due to death. Composite probabilities were 51.1%, 75.5%, and 83.7% respectively.

Data for comparison of the over 60 and diabetic groups with the entire patient population as well as data comparing all groups with the national experience are shown in Tables 1 and 2.

### Complications

There were 315 hospitalizations during the five-year period for an occurrence rate of 1.78/patient year. There were 168 (53%) nondialysis related admissions (0.95/patient year) and 146 (47%) dialysis related admissions (0.83/patient year). Among the dialysis related admissions, 46 (31%) were for peritonitis, 38 (26%) for infected catheter removal, 25 (17%) for noninfected nonfunctional catheter replacement, nine (6%) for herniorrhaphy, and four (3%) for miscellaneous reasons.

Patients over 60 years of age had 75 hospital admissions (1.5/patient year) of which 41 (55%) were nondialysis related (0.8/patient year) and 34 (45%) were dialysis related (0.7/patient year).



TABLE 1  
PROBABILITY (%) OF LEAVING CAPD  
DCI — Lexington

	All Patients	Over 60 years	Diabetics	All Patients	Over 60 years	Diabetics
<b>Transfer to Hemodialysis</b>						
Interval (years)						
0-1	9.0	0.0	15.8	20.2	19.5	20.6
1-2	29.2	7.4	28.7	33.6	32.3	33.4
2-3	35.5	20.6	28.7	43.1	43.1	41.1
3-4	40.3	20.6	28.7	*47.9	*46.9	*42.8
4-5	46.9	73.5	28.7	—	—	—
<b>Death</b>						
Interval (years)						
0-1	13.7	24.5	25.0	16.2	24.5	24.4
1-2	31.5	52.8	36.5	28.2	40.0	41.5
2-3	40.0	59.6	57.7	39.6	50.7	50.7
3-4	44.5	59.6	57.7	*45.7	*58.5	*68.9
4-5	44.5	59.6	57.7	—	—	—

\*3½ years

TABLE 2

PROBABILITY (%) OF LEAVING CAPD			
All Reasons	DCI — Lexington		
Intervals (years)	All Patients	Over 60 years	Diabetics
0-1	31.1	33.3	51.1
1-2	66.4	61.6	75.5
2-3	75.8	76.0	83.7
3-4	80.8	76.0	83.7
4-5	84.6	92.0	83.7
<b>Transplant/Transfer: CAPD</b>			
Intervals (years)			
0-1	10.9	7.7	15.8
1-2	29.3	7.7	39.8
2-3	35.5	20.9	39.8
3-4	40.3	20.9	39.8
4-5	40.3	20.9	39.8

Diabetic patients had 60 admissions (2.5/patient year) of which 36 (60%) were nondialysis related (1.4/patient year) and 24 (40%) were dialysis related (0.9/patient year).

The total length of stay for these admissions was 2,562 days or 14.5 days/patient year. The length of stay for dialysis related admissions was 954 days (37%) or 5.3 days/patient year and 1,617 days (63%) for non-dialysis related admissions or 9.2 days/patient year. Nationally, hospital stays were 8.3 days/patient year for dialysis related admissions and 19.7 days/patient year for all admissions. Patients over 60 stayed 862 days (17.8 days/patient year) and diabetics stayed 618 days (23.6 days/patient year) for all causes.

There were 195 episodes of peritonitis in 77 patients for an incidence of 1.1 episode/patient year. The incidence nationally was 1.4/patient year. Patients over 60 years had a peritonitis incidence of 0.9 episodes/patient year and diabetics 1.4 episodes/patient year.

The bacteriology of these episodes of peritonitis included 49.1% Gram positive organisms, predominantly *Staphylococcus aureus* (25.6%) and *Staphylococcal epidermitis* (20%), 13.8% Gram negative organisms, 1% fungus, 0.5% anaerobics, and 35.6% with negative cultures. We believe the latter number was due to the large number of laboratories utilized, each with limited experience in culturing peritoneal fluid. The National Registry reported 56.5% Gram positive, 18.9% Gram negative, 3.2% fungal, and 17.4% negative cultures.

Peritonitis was cured with intraperitoneal antibiotic therapy in 156 episodes (80%) and 39 episodes (20%) required catheter removal for cure.

One hundred fifty-eight catheters were placed during the five-year period. They were almost exclusively double cuff Tenckhoff catheters (147 or 93%). The average catheter life was 1.1 years with a range of 0.04 to 4.6 years. Sixty-one catheters were removed (0.35/patient year). The Registry incidence of catheter "replacement" was 0.25/patient year. It was not known if all catheters removed nationally were replaced. In our population, 22 (36%) were nonfunctional without infection and 39 (64%) were functional with intractable infection.

Peritoneal catheters are placed under local anesthesia utilizing a midline, infraumbilical incision. Blunt dissection is carried out to the peritoneum and the internal segment of the catheter is placed into the peritoneal space with the internal cuff resting on the peritoneal membrane. A subcutaneous tunnel is constructed laterally from the initial incision and the external segment of the catheter brought through the skin through a puncture wound ("exit site"). The external cuff lies in the tunnel 2-3 cm from the exit site. The subcutaneous tissue and skin are closed with the suture material of choice but the catheter is not sutured to either the peritoneum or skin. The catheter is irrigated in the operating room to insure proper inflow and outflow. Postoperatively it is irrigated with 50 cc of saline three times daily for at least 48 hours. Dialysis is then begun utilizing reduced volumes of dialysate which are gradually increased over 7-14 days.

There were 55 episodes of catheter exit site infection for an incidence of 0.30 episodes/patient year compared to 0.55 episodes/patient year nationally. All episodes resolved with treatment, 22 (40%) with local care and antibiotics and 33 (60%) with local care only.

Figure 3 shows the probability of experiencing the first complication for the entire population. Only Registry data for peritonitis are truly comparable since their hospitalization data are for CAPD-related causes only and catheter data are for replacements only. Complication rates are high. The probability of any complication at one year and five years is 78.9% and 95.9% respectively; of being hospitalized for any cause 70.3% and 94% respectively; of having peritonitis 60.6% and 90.8% respectively; and of having a catheter removed 35.6% and 63.4% respectively. The peritonitis data are comparable to the Registry experience of 61.6% at one year, but our five-year probability was reached nationally (90.6%) in 3½ years.

Those patients over 60 years of age had complication probabilities similar to the total population. At one year and five years the respective probabilities for any complication were 80% and 96.7%; for hospitalization were 64.4% and 90%; for peritonitis were 56.6% and 95.2%; and for catheter removal were 35.3% and 43.9%.

All diabetic patients had either experienced a complication or were withdrawn from analysis by two years. At one year and two years, the respective probabilities for any complication were 80.8% and 93.6%; for hospitalization were 76.6% and 95.3%; for peritonitis were 58.5% and 91.7%; and for catheter removal were 31.6% and 58.9%.

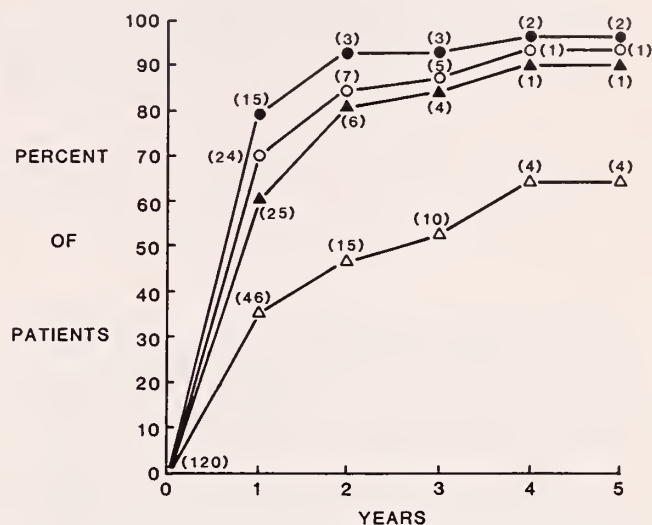


Fig 3: Probability of first complication: any one event (●—●), peritonitis (▲—▲), hospitalization (○—○), and catheter removal (△—△).

## Discussion

While CAPD has increased the number of patients utilizing home dialysis, the widespread use of this technique has not been without major criticisms. Those features receiving most attention have been its high complication and attrition rates. However, most of the unfavorable data generated from reviews of CAPD experiences have come from earlier studies of populations comprised of disproportionately high percentages of "high risk" groups, principally diabetics and the elderly. More current studies<sup>7-13</sup> have yielded data from single and multicenter populations ranging 21 to 460 CAPD patients and 30 to 1987 hemodialysis patients followed for one to six years. When unadjusted for age or diabetes, survival rates at one year, two years, and five years for CAPD patients were 87.5%, 68%, and 33% respectively compared with 84.5%, 72%, and 41% respectively for hemodialysis patients at similar intervals.

Survival rates adjusted for age (less than 55 years) and diabetes were available at two-, three-, and five-year intervals. They were for CAPD and hemodialysis respectively 91% versus 96%, 62.6% versus 74.1%, and 75% versus 55% with only the latter achieving significance. Fewer studies have examined comparative morbidity, usually defined as hospital days per patient year. Gokal et al,<sup>12</sup> found similar periods of hospitalization for CAPD and hemodialysis patients and noted



that the duration of stay for vascular access problems was similar to that for peritonitis and catheter problems. Carlson et al,<sup>11</sup> found more hospital admissions and longer lengths of stay for CAPD patients although it was noted that the percentage of "high risk" patients was greater in the CAPD group. Maiorca et al,<sup>7</sup> also compared technique survival. The adjusted survival rates at 4½ years were 67% for hemodialysis and 45% for CAPD ( $p < 0.025$ ). When diabetics were excluded, the rates became 66% for hemodialysis and 56% for CAPD ( $p = \text{NS}$ ).

Unfortunately we do not have similar morbidity and mortality data from our local hemodialysis population. However, comparison of survival and complication rates show that we are at least equivalent, and often superior, to the national experiences at every point of comparison. The National Registry data are, in turn, comparable to the published experience of those centers comparing CAPD and hemodialysis. Moreover, while our data confirm a high attrition rate (85% by five years), this attrition rate is not solely due to failure of the technique. Indeed, the probability of technique failure

at five years was 47%. There was also a 40% probability of transfer to another CAPD program or transplantation. There was a 44.5% probability of death but only one of our deaths could be directly related to CAPD. Our data would also suggest that elderly patients are not at a higher risk since other than an expected age-related increase in mortality, their complication and technique survival rates were similar to the entire population.

The costs of CAPD and home hemodialysis are comparable, each ranging \$15,000 to \$18,000 per year per patient. The cost of center hemodialysis ranges \$25,000 to \$30,000 yearly for each patient. These costs do not include hospitalization expenses.<sup>14</sup>

In summary, we conclude: (a) CAPD is a viable option for endstage renal disease therapy; (b) when similar populations are compared, CAPD and hemodialysis have similar survival and complication rates; (c) elderly patients may not be "high risk" CAPD patients; and (d) the high attrition rates attributed to CAPD are not entirely due to technique failure but are also due to transfer, transplantation, and non-dialysis related death.

**References** 1. Ganter G: Über die Beseitigung giftiger Stoffe aus dem Blute durch Dialyse. *Muench Med Wochenschr* 47(2): 1478–1480, 1923. 2. Boen ST, Mulinari AS, Dillard DH, Scribner BH: Periodic peritoneal dialysis in the management of chronic uremia. *Trans Am Soc Artif Intern Organs* 8: 256–262, 1962. 3. Tenckhoff H, Schechter H: A bacteriologically safe peritoneal access device. *Trans Am Soc Artif Intern Organs* 14: 181–186, 1968. 4. Popovich RP, Moncrief JW, Decherd JF, et al: The definition of a novel portable-wearable equilibrium peritoneal technique. *Abst Am Soc Artif Intern Organs* 64: 1976. 5. Oreopoulos DG, Robson M, Izatt G, et al: A simple and safe technique for continuous ambulatory peritoneal dialysis (CAPD). *Trans Am Soc Artif Intern Organs* 24: 484–489, 1978. 6. Steinberg SM, Cutler SJ, Novak JW, and Nolph KD: Report of the National CAPD Registry of the National Institutes of Health, January 1, 1981 - August 31, 1985. NIH Publication, January, 1986. 7. Maiorca R, Cancarini G, Manili L, et al: Life table analysis of patient and method survival in continuous ambulatory peritoneal dialysis and hemodialysis after six years experience. In: Khanna R, Nolph KD, Prowant B, Twardowski ZJ, Oreopoulos DG, eds. *Advances in Continuous Ambulatory Peritoneal*

*Dialysis*, 1986; 27–30. 8. Kurtz, SB and Johnson WJ: A four-year comparison of continuous ambulatory peritoneal dialysis and home hemodialysis: A preliminary report. *Mayo Clin Proc.* 59: 659–662, 1984. 9. Capelli JP, Camiscioli TC, Vallorani RD: Comparative analysis of survival on home hemodialysis, in-center hemodialysis, and chronic peritoneal dialysis (CAPD-IPD) therapies. *Dial Transplant* 14: 38–52, 1985. 10. Hellerstedt WL, Johnson WJ, Ascher N, et al: Survival rates of 2,728 patients with end-stage renal disease. *Mayo Clin Proc* 59: 776–783, 1984. 11. Carlson DM, Duncan DA, Naessens JM, Johnson WJ: Hospitalization in dialysis patients. *Mayo Clin Proc* 59: 769–775, 1984. 12. Gokal R, Lloyd C, Baillod R, et al: Multi-center study on the outcome of patients on CAPD and hemodialysis. In: Maher JF and Winchester JF, eds. *Frontiers in Peritoneal Dialysis*, 1986; 293–296. 13. Piccoli G, Segoloni GP, Quarello F, Vercellone A. CAPD in Italy: A multi-center study. In: Maher JF and Winchester JF, eds. *Frontiers in Peritoneal Dialysis*, 1986; 397–303. 14. Bernstein and Company Report: *The kidney dialysis industry: A strategic analysis*. New York, 1981.

# Diagnostic Assessment of Individuals With Misleading Behaviors

William D. Weitzel, MD

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*Malingering behavior complicates attempts to render fair and accurate descriptions of clinical disorders. Confirming findings and myths are identified. Situational-specific settings determine likelihood and significance of shamming. Evaluating clinicians should entertain suspended judgment in entitlement and legal-administrative examinations.*

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**F**eigned illness behavior arouses a sense of betrayal, curiosity, and anger in many physicians. When we were medical students, we were taught that the use of the term "malingering" reflects poorly on the physician-evaluator and may betray an incomplete understanding and appreciation of an individual's presenting signs and symptoms. One author has even suggested that it is better to diagnose and treat in error than to fail to diagnose and to fail to treat in error.<sup>1</sup> Malingering behavior has no meaning in the traditional physician-patient relationship and only becomes an issue when the physician represents some social body and plays a role analogous to that of an umpire in a competitive sport.<sup>2</sup>

Four concepts need to be defined and distinguished: (1) Malingering, (2) Factitious Disorder, (3) Conversion Disorders, and (4) Compensation Neurosis.

Malingering is a description of behavior. The essential feature is the voluntary production of false or grossly exaggerated physical or psychological symptoms. Such findings are produced in pursuit of a goal that is obviously recognizable when an individual's circumstances are understood.<sup>3</sup>

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Malingering can be further subdivided in terms of content: (a) Pure simulation involves the feigning of symptoms that don't exist. This deliberate and fraudulent type of behavior with the accompanying blatant evidence of psychopathology is not often encountered. Individuals who do present in this way are usually males between the ages of 25 and 37 with a history of frequent job changes. Characteristically, these men have a history of few or no binding personal ties such as families and lack material responsibilities such as homeownership.<sup>4</sup> (b) Dissimulation describes the concealment or minimization of existing symptoms. A coverup, decoy malingeringer has had a severe injury which the individual believes has resulted in a serious disorder. The discovery must be avoided at whatever cost. The symptoms presented are consequently remote from the real problem.<sup>4</sup> (c) False imputation depicts a situation in which an individual ascribes actual symptoms to causes consciously recognized to have no relationship to the onset of symptoms.<sup>4</sup> (d) Partial malingering connotes the conscious exaggeration of symptoms.<sup>5</sup>

The diagnostic picture of a factitious disorder is characterized by physical/psychological symptoms that are produced by an individual and under voluntary control to pursue goals that are involuntarily adopted. Such a concept presumes the existence of an unconscious aspect of mental functioning. The sense of voluntary control is subjective and can only be inferred by an outside observer. Factitious disorder behavior is distinguishable from malingering behavior because there is no apparent goal other than to assume the role of patient. Such behavior is usually indicative of a severe personality disturbance.<sup>6</sup>

The diagnosis of (hysterical) conversion disorder describes a clinical picture in which the predominant disturbance involves a loss or alteration of physical functioning that suggests a physical disorder but which instead is better understood as an expression of psy-



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chological conflict or need. This concept has its roots in psychodynamic rather than descriptive psychiatry. The disturbance is not under voluntary control and after appropriate investigation cannot be explained by known pathophysiological mechanisms.<sup>7</sup>

“Compensation neurosis is a state of mind born out of fear, kept alive by adversity, stimulated by attorneys, and cured by a verdict.” This biting assessment was rendered by Foster Kennedy, MD, who was a prominent Harvard University neurologist.<sup>8</sup> This syndrome is described as a collection of psychological reactions which occur after an accident and are thought to be produced or maintained by a compensation claim. This diagnostic concept lacks support among academic nosologists, owes its creation to professionals who participate in medical-legal exercises, and expresses a moral judgment as much as a clinical understanding. Characteristically, this syndrome follows an injury when the patient believes there is reasonable hope of financial compensation and the clinical picture shows a mixture of organic and psychological complaints. The disability often lacks an obvious casual connection with the psychopathology described and is usually out of proportion to the clinical findings.<sup>9</sup> *International Classification of Diseases - 9* includes “compensation neurosis” under the disease category of “hysteria”; however, there is no entity of “compensation neurosis” as a recognized disease per se. Patients who are described as having a compensation neurosis usually lack motivation, are passive in seeking medical treatment, and seldom return to gainful employment. There is a reluctance to be explicit about symptom complaints and, curiously, there are expressions of satisfaction with previous physicians whose treatments have not worked.<sup>10</sup> Such individuals seldom involve themselves in psychological treatments designed to change disability status.

This paper focuses on some of the characteristic ways malingered behavior can be identified. The caveat is offered that even the best clinician cannot be sure of the judgment of malingering. The official *Diagnostic and Statistical Manual - III* of the American Psychiatric Association specifically states that malingering is not a psychiatric disorder but an act, and, thus, it is not so much a matter of diagnosis as it is a matter for judicial finding based on the facts of an individual case.<sup>11</sup> The only indisputable observations to prove malingering are made out of the medical examination room, ie, the patient must be closely observed doing something he claims to be quite unable to do when he believes he is not being observed – eg, walking without a limp or lifting.<sup>9</sup>

The settings in which malingered behaviors are most likely to occur include the hospital emergency room and in a jail or prison. Physicians are often challenged to consider this explanation during a clinical evaluation for a Workers’ Compensation claim; while in the process of a Social Security disability evaluation; and in the course of an assessment for personal injury litigation. In general, when there is a medical-legal aspect to a clinical issue, the phenomenon of malingering behavior needs to be considered.

Individuals who engage in malingering behaviors often present with symptom complaints of extreme severity and often include infrequent manifestations of a syndrome. They are consistent in their self report of their problems with different examiners, but the sequence of symptom development is often inconsistent with the diagnostic possibilities considered by the clinician. A malingerer is often careful with his word choice.<sup>5</sup> There is usually a marked discrepancy between the person’s claimed distress and the objective findings. A history of sudden onset and an increase in the more obvious rather than subtle symptoms predominate. Clinicians can easily elicit symptoms but are often unsuccessful in attempts to pursue successfully extensive diagnostic workups or trial treatment regimens. Such individuals have a heightened memory about the details of their injury which are offered during the diagnostic process and an overly inclusive list of symptoms.<sup>12</sup> Often individuals engaged in malingering behavior are experienced by the examiner as both demanding and lacking in sincerity.

Typical of malingering individuals is the report of an inability to accept any kind of work and yet the tenacious pursuit of compensation benefits and the continued involvement in recreational activities, auto maintenance, and household chores. Such individuals are usually unwilling to make definite statements about returning to work or other personal expectations and are expansively complimentary in their descriptions of themselves prior to injury despite a possible history of drifting and the inability to stick with any one job for very long. The pattern of malingering behaviors most often seen in outpatient settings involve neurotic concerns, including expressions of worry, inability to function, and hopelessness. These subjective symptoms are common in fake-sick interviews because they don’t lead to hospitalization.

Plainly stated, individuals who are malingering are engaged in lying, ie, engaging in behaviors meant to deceive or give the wrong impression.<sup>13</sup> Much research

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has been done about lying and the following have been substantiated: (1) Individuals who lie characteristically show hesitation and pauses in their speech.<sup>14,15</sup> (2) Lying answers are longer than truthful answers. (3) Unpremeditated lies are easier to detect. (4) People who exaggerate false sentiments ("hamming") are much less likely to be caught in their lies than those who are not histrionic. (5) Individuals who pretend to like someone they actually dislike express more liking than when describing someone they actually do like. (6) The face is especially well equipped to tell lies and provides the least reliable clues for someone trying to detect deception. (7) Often, deceivers cannot eliminate tension in their lower bodies; therefore, there is an incongruity between a calm facial expression and active movement of arms, legs, hands and feet. Listeners and readers are significantly better judges of deception than watchers (face-to-face). (8) Pay attention to changes in pitch and intensity of voice. The voice is much leakier than the face. (9) The ability to express one's emotions accurately appears quite distinct from the ability to interpret the emotions of others accurately whether the emotion is real or feigned.<sup>16</sup> (10) The most reliable leak in the detection of lying is the discrepancy between two channels of communication — eg, a smiling face and an angry voice. Such a discrepancy is called leakage because it involves two modes of communication that are hard to control simultaneously and the result is dissonance.<sup>15</sup> (11) If you are going to tell a lie, you are better off face-to-face. If you suspect a lie, you will do a better job of detection by listening over the phone. (12) People presume that one can readily control the tone of voice and use it to mislead. Because of the acoustics of the skull, the voice we hear as we speak does not sound the same to us as to our listeners.<sup>15</sup> (13) Overall demeanor seems to count more than the message that is told. A malingerer who makes an overall good impression is less likely to be perceived as deceptive and dishonest even when the message is deceptive.<sup>12</sup> (14) Our implicit or intuitive assumptions regarding an individual's truthfulness may influence us to see certain individuals as honest or dishonest regardless of statement veracity.<sup>12</sup>

Psychological testing is often used as an aid to determine whether an individual is malingering. The most widely used psychological test is the Minnesota Multiphasic Personality Inventory (MMPI) with particular focus on the validity scales. The MMPI is used in the evaluation of neurotic and psychotic individuals. When the difference between the F and K validity scales is

greater than 11 and when the F scale T value is greater than 80, one has evidence of an invalid profile and the possibility of malingering behavior should be considered.<sup>12</sup> Ways do exist to help detect the possibility of faking on the Halstead-Reitan Battery which is a sophisticated neuropsychological test widely used to quantify degrees of brain injury. When the Halstead-Reitan test results for volunteer malingerers were compared with non-litigating head injury patients by a blind rating panel of neuropsychologists, correct designations ranged from 44% to 81% of head injured subjects and from 25% to 81% of malingerers. Overall, the experts correctly classified between 60% and 69% of patients.<sup>17</sup> Malingerers try to simulate what they think would be obvious problems such as memory loss or gross motor deficits.<sup>18</sup>

Certain myths about the detection of lying prevail: (1) Lying can be detected regularly with the use of a lie detector. The polygraph has an accuracy of between 64% and 71% against the chance expectancy of 50% when polygraph charts are scored blindly and are, thus, not influenced by clinical impressions of the subject or of the evidence. A polygraph protocol is biased against truthful subjects. At least half of the subjects may be erroneously classified as deceptive. The polygraph method more often detects lying than it does truthful responding and considerable subjectivity may influence the polygraph interpreter in the evaluation of the autonomic disturbances associated with a particular question.<sup>19,20</sup> (2) One can usually figure out how an individual is really feeling. Accuracy of detecting that some deception has occurred is far greater than the accuracy in detecting the true underlying feeling state.<sup>5</sup> People good at detecting that deception is occurring are not particularly skilled at reading the speaker's underlying affect.<sup>16</sup> (3) "It takes one to know one." Skill at lying does not necessarily correlate with catching other people lying.<sup>15</sup> (4) Look the subject in the eye. The face, by itself, involves expressions that are easiest to control.<sup>15</sup> It is the least reliable body part to monitor. (5) It is always harder to fool someone who is on guard. Surprisingly, suspicion may make a person more easily mislead — particularly if he relies on looking the liar in the eye and focuses on the liar's demeanor. Such over-attentiveness to the face can interfere with noticing more leaky clues such as tone of voice.<sup>15</sup> (6) Ability to identify lying is generalizable. Those who prove clever at detecting sugarcoated lies are not particularly adept at recognizing vinegar-coated lies and vice-versa.<sup>15</sup> (7) Psychiatrists and psychologists are good at detecting



## MISLEADING BEHAVIORS—Weitzel

malinger behavior. Current literature offers little support that psychiatrists and psychologists are good at detecting malingerers who have given false information on psychological tests.<sup>12</sup> (8) Hypnosis and sodium amytal can help get at the truth. Wrong.<sup>21</sup> Although sodium amytal and hypnosis are useful in uncovering repressed memories, they are not reliable in ascertaining truth.<sup>4</sup>

Lying provokes in the discoverer an intense reaction on the grounds that the liar has gained undeserved advantage in monetary benefit, social position, or enhancement of power.<sup>21</sup> Research also suggests that lying is more tolerated in someone we like or in high social position than in people of lower socio-economic achievement.<sup>21</sup> In attempting to discern malingering, tact and consideration are usually more effective than bulldozing and ridiculing. Check old records and get collateral interviews from other involved persons. Distraction can be used to discern movements and the capabilities and capacities which a person reports as beyond current ability—for example, an individual who complains of a bad tremor which interferes with writing may give himself away when he successfully lifts and drinks from a soda can without spilling the beverage. A malingering individual may try to be vague about his or her background and may react to close questioning with anger and hostility. Testing tolerance for self incrimination often suggests another clue—someone trying to deceive often denies even common human foibles. Since the “unconscious” doesn’t recognize the negative, be suspicious of someone who spontaneously raises the issue of his own truthfulness, eg, “to be honest with you.”

In most studies of malingering individuals, such behaviors were not part of the pre-injury personality.<sup>21</sup> In post-injury evaluations, malingered behavior often arises after the objective threatening injury has altered a person who: (a) loses hope of return to pre-injury functioning; (b) begins to perceive himself with new identifications; (c) is aware that sustenance now depends not on the ability to work (lost) but by the obligation the effects of injury and incapacity have imposed upon society. Thus, self concept becomes attracted to and equated with the state of invalidism<sup>21</sup>.

When an examiner suspects malingering behavior, questions during an examination should be open-ended so that the examinee does not know what is expected of him. Extending the length and thoroughness of an examination combined with repeated examinations by the same clinician provides circumstances in which it is more difficult for the individual to recall feigned

responses both verbal and behavioral. Factors that need to be considered in a fair and complete biopsychosocial assessment of a person with a prolonged disability after an accident include evaluation of the psychological effect of the accident/injury including alteration of self concept and body image along with evidence of personality disorganization and regression in level of adaptation. Interpersonal dynamics involving family members and social support groups need to be investigated for evidence of change. Cultural explanations of illness behavior and folk beliefs concerning health and disease must be appreciated and, finally, work factors involving level of pre-injury job satisfaction are germane.<sup>11</sup>

Each individual deserves a fair, complete, and considerate medical examination from a physician when presenting with signs and symptoms of illness behavior. In our clinical work, we presume on the truthfulness of our patients. As examiners in medical-legal settings, we must suspend such assumptions and all matter of explanations for what we see, hear, and learn should be entertained. We best preserve the integrity of our profession and further the delivery of entitlement benefits to those who truly qualify with such a perspective.

**References** 1. Ziskin J: Malingering of psychological disorders: *Behavioral Sciences and the Law* 2:39–49, 1984. 2. Szasz TS: Malingering: Diagnosis of social condemnation: *Archives of Neurology and Psychiatry* 76:432–443, 1956. 3. *Diagnostic and Statistical Manual of Mental Disorders*. Third Edition (DSM-III): APA Press, 1980, Washington, D.C. Pg 331. 4. Resnick PJ: Detection of malingered mental illness: *Behavioral Sciences and the Law* 2:21–38, 1984. 5. Garner H: Malingering: *Illinois Medical Journal* 128:318–319, 1965. 6. DSM-III, p285. 7. DSM-III, p244. 8. Kennedy F: The mind of the injured worker: its effects on disability: *Compensation Medicine* 1:19–24, 1946. 9. Woodyard JE: Diagnosis and prognosis of compensation claims: *Ann R Coll Surg Engl* 64:191–194, 1982. 10. Weighill VE: Compensation neurosis: a review of the literature: *J Psychosom Res* 27:97–104, 1983. 11. Mendelson G: Compensation neurosis: an invalid diagnosis: *Med J Aust* 142:561–564, 1985. 12. Rogers R: Toward an empirical model of malingering and deception: *Behavior Science and the Law* 2:93–111, 1984. 13. *Webster's New Collegiate Dictionary*: G. & C. Merriam Company, Springfield, Massachusetts, 1980 p680. 14. Harrison AA, Kwalek M, Raney DF, Fritz JC: Clues to deception in an interview situation: *Social Psychology*: 41:156–161, 1978. 15. Goleman D: Can you tell when someone is lying to you: *Psychology Today* 16:14–23, 1982. 16. DePaulo BM and Rosenthal R: Telling lies: *J Pers Soc Psychol* 37:1713–1722, 1979. 17. Gochel RA: Detection of faking on the Halstead-Reitan Neuropsychological test battery: *J Clin Psychol* 39:731–742, 1983. 18. Heaton R, Smith H, Lehman R and Vogt A: Prospects for faking believable deficits on neuropsychological testing: *J Consult Clin Psychol* 46:892–900, 1978. 19. Keninmuntz B: Lie detectors fail the truth test: *Harvard Business Review*: 63(4):36–42, 1985. 20. Lykken D: The detection of deception *Psychol Bull* 86:47–53, 1979. 21. Braverman M: Malingering *Occup Health Saf* March–April, 1978 p 36–48.

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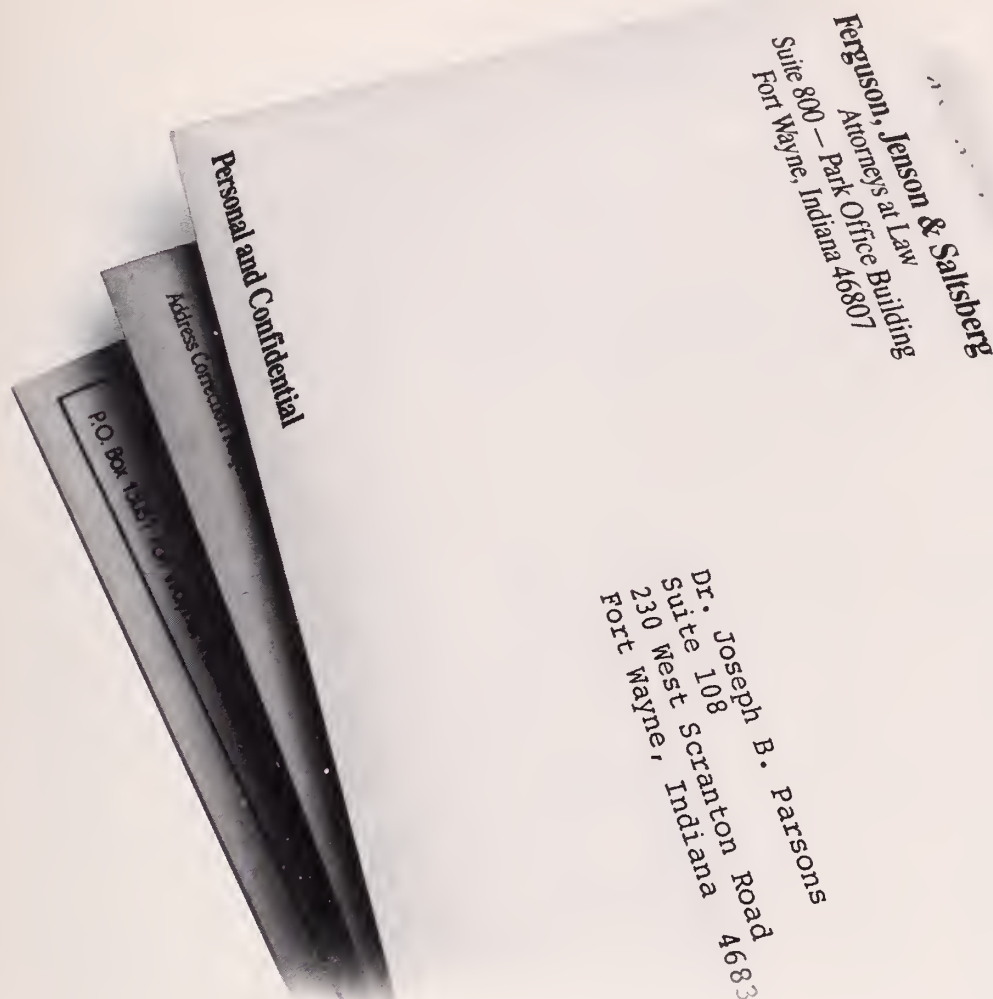
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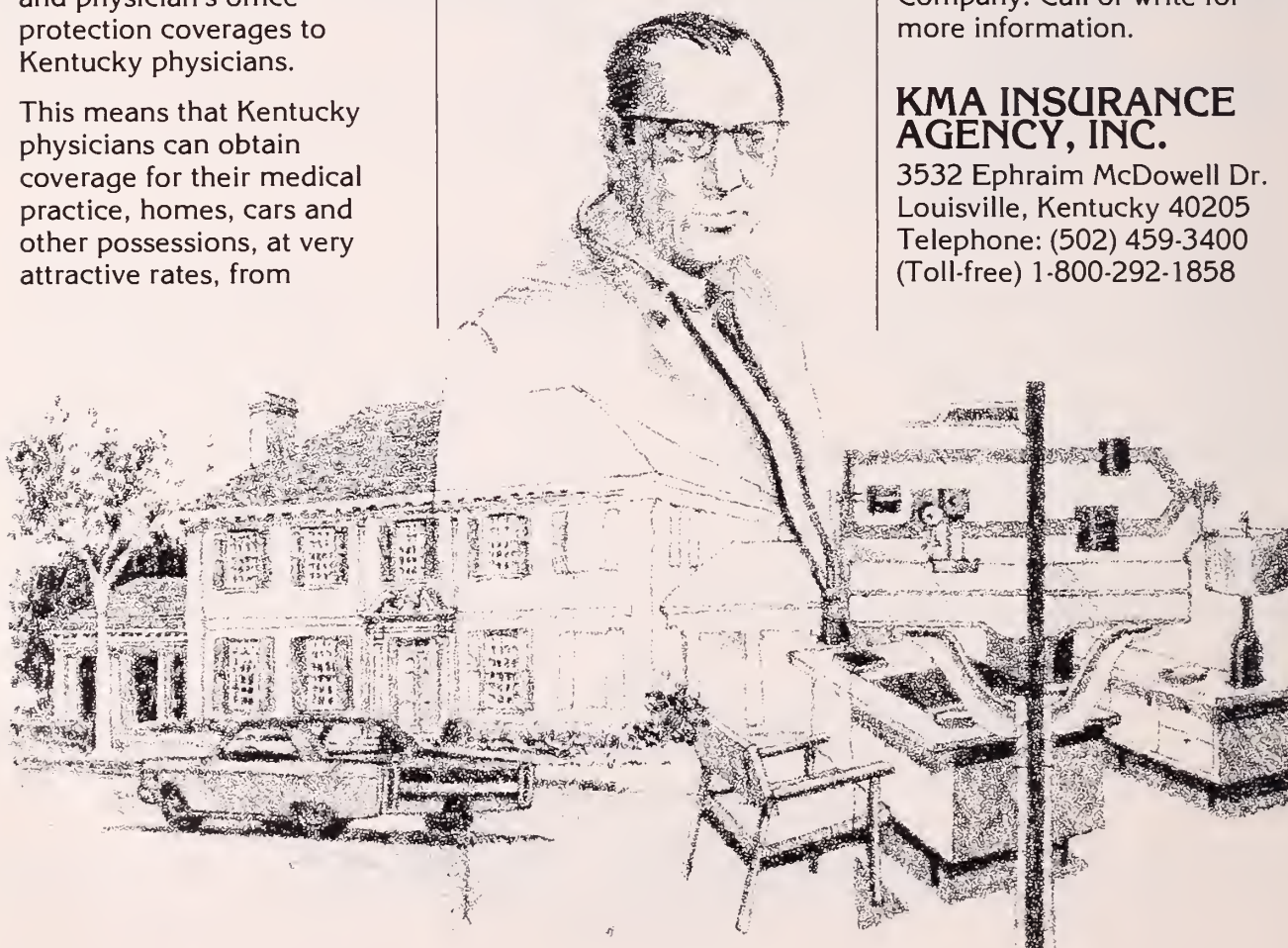
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# A Prescription for Survival: Trauma Care Education in the United States

Patrick Shawn O'Reilly\* wore dark glasses on the plane destined to Shannon, Ireland. We eagerly discussed his native country, but as we talked, it became clear that he was in some ocular discomfort. He had sustained simultaneous bilateral ocular injuries and was relieved to have an ophthalmologist nearby to discuss the circumstances of his injury and to offer reassurance as to his potential outcome.

It seems Patrick Shawn O'Reilly had eagerly boarded a tour bus one morning in Denver on his sight-seeing holiday in the United States. A veterinarian from Dublin, this was his first trip to America. The group of 27 or so on the bus had become very friendly by this point in their tour. Reaching the Continental Divide was the highlight of the morning. There, Patrick enjoyed photographing the young German couple he had befriended for their scrapbook. He teased and played with a nearby 6-year-old boy who responded with delighted squeals of mock horror.

The bus was to continue southwest of Denver, but all plans were abruptly thwarted as a boulder over 17 feet in diameter became visible to him, first in his peripheral vision and then straight ahead, rolling off the cliff of the mountain beside him onto the road and, finally, as if in the slow motion of a bad dream, into the bus in which he was riding. The images of that moment have become

ever more vivid as he recollects the events that followed thereafter. The boulder crushed the bus, and six individuals died immediately, including the young German couple seated in front of him whose photograph he had snapped that morning.

Dazed at first, he turned impulsively to run from the scene, overcome by the death and injuries around him. At some point, he decided to turn back in hopes that he might be able to help some of the others. The details were painfully vivid in his mind as he recounted to me the startling softness of the cranium of the young 6-year-old whose head rested on his shoulder as he lifted his limp body from the wreckage.

Patrick escaped with *only* multiple bilateral corneal abrasions from multiple fragments of glass embedded in his eyes. He counted himself among the lucky, although he had lain in the bed of a small community hospital in a strange country with patches on both eyes for three days before being released to return to his native country, Ireland.

Patrick O'Reilly said he was the last cared for, three hours later, at the nearby community hospital. In three hours, the accident was reported, the site identified and accessed, on-site emergency care and triage provided. Some of the injured were helicoptered to Denver, others to a nearby hospital. Multiple fractures, head and chest wounds, and abdominal bleeding were attended to in 17 survivors, and, yes, within three hours of his first glimpsing the

boulder, the glass fragments were removed from his eyes and both eyes were patched.

As I drove the left side of the winding country roads of Ireland, narrowed by continuous stone walls and hedges on each side, used as major highway and farmer tractor routes alike, I often wondered what my chances would be of surviving if injured on these routes.

Most of the people on the bus survived the disastrous coincidence in time and space of the boulder being released by construction workers on the road above and the passage of their bus on a previously happy holiday through the mountains of the Denver area. They survived because trauma care in the United States is exceptional. Furthermore, the education of physicians in trauma care is sufficiently standardized that even physicians in small community hospitals in out-of-the-way places are well versed in the ABCs of CPR and trauma care. They survived because, even on a remote road poorly accessible by other crossing highways, communication networks are in place to permit use of helicopters and initiate a triage system to deliver those in greatest need to the nearest available hospital and medical services. Their survival is a living testament to the quality and consistency of trauma care medical education in the United States.

Martha Keeney Heyburn, MD

\*Name changed to protect patient's identity.



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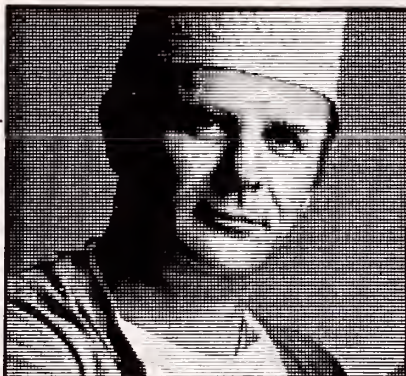
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## BOOK REVIEW

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### **The Bill Schroeder Story**

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Almost three years have passed since the grand experiment took place at Humana Hospital Audubon in Louisville. Time has not eroded the memory of a remarkable adventure that was witnessed by the country and certainly by the medical profession locally. Events swirled around Louisville like a tornado, seeming to engulf the city in national exposure. Now the family of Bill Schroeder has documented their story, not only as a historical account, but also as an explanation of the family dynamics which inexorably changed them.

Information was available from the family, press reports, the hospital and the medical team. Interviewing of involved parties provided detail omitted from public eye and from official records. From such descriptions the story focuses on the personal side, the emotional vicissitudes, petty problems, moral dilemmas, etc. Comforted sometimes, burdened

other times by the push of public scrutiny, the family members and particularly Margaret Schroeder became real actors in this book, so tangible because they were human like our own relatives.

Beginning the book is a brief description of Bill Schroeder before his cardiac collapse. Several coronary events left his heart ravaged, and his diabetes and age condemned him to medical support rather than heart transplantation. Tough-minded and energized by an enduring will to live, Bill Schroeder wanted the artificial heart to "get myself healthy" but also bore the visionary perspective of his being a pioneer to "help other people," thus he would "feel like my mission's been accomplished."

Details of the operation, press coverage, relationships developed and strained, and medical specifics are woven through the book to make a good story for the reader. Certainly not cumbersome and in fact interest-

ing for those fascinated by facts and feelings intermingled, the rest of the chapters accelerate to the denouement, Bill Schroeder's fatal complications. Drama and tragedy are explained to the reader in the only part of the book that seems cold. However those who lived through such and the writers probably have to take the end with some numbness.

It does not take long to read, but it does take a while to consider the happening. Years have passed, questions raised, discoveries have come, and the participants have changed their positions. Perhaps this man and this experiment are destined to be enshrined for the learning that took place. To share in the personal aspect as well, all of us will be the better for understanding what happened.

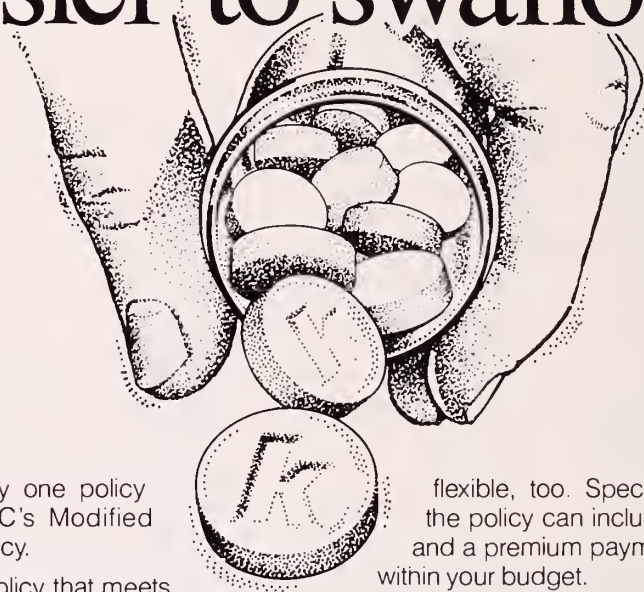
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### *An Open Letter to Spouses of Kentucky's Physicians . . . .*

At this time, unprecedented in the history of medicine, when so many outside influences are shaping the practice of medicine, it is more important than ever to belong to the Medical Auxiliary, a very important support group for our physician spouses. Change, beyond our doctors' control, is destined to come to the practice of medicine and we feel the effects not only professionally, but in our personal lives as well.

As members of auxiliaries to medical societies, we can help promote good medicine in our communities and our state, and thereby enhance the image of medicine. We can also become informed on the important issues affecting each one of us, including the malpractice crisis and escalating insurance costs, changes in governmental legislation and Medicare, DRGs, HMOs, etc.

The AKMA supports special health projects throughout the state and this year is focusing on AIDS education. Last year, auxiliaries across the state, through AKMA, gave over \$45,000 to support programs for medical students and resident physicians through AMA-ERF. And AMAA stands ready with a wealth of information and resource persons and materials to help us accomplish our goals.

One of the special things about physician's spouses is that, although we have the one strong bond of all being married to physicians, we are all individuals, interested in many things and therefore drawn to many different pursuits. We soon find we cannot do it all and choices have to be made. For this same reason, it is important to build and maintain that connectional relationship to our spouse's profession. For one of the reasons we are able to do what we want with our lives is precisely because we are spouses of physicians.

If you are already an active auxiliary member, we salute you! If you have not yet taken that step, I invite you to do so. By belonging to the Auxiliary you are making a positive statement in support of medicine. Annual, tax-deductible dues for state and national are \$30.00 plus your county dues. If you do not live in a county which has an organized auxiliary, you may become a Member-at-Large by paying only state and national dues. Please feel free to contact me for further information concerning these membership categories.

Thank you for your consideration and for your support.

Sincerely,

Esther Jansing (Mrs. C. William)  
AKMA - 1st Vice President  
Membership Chairman

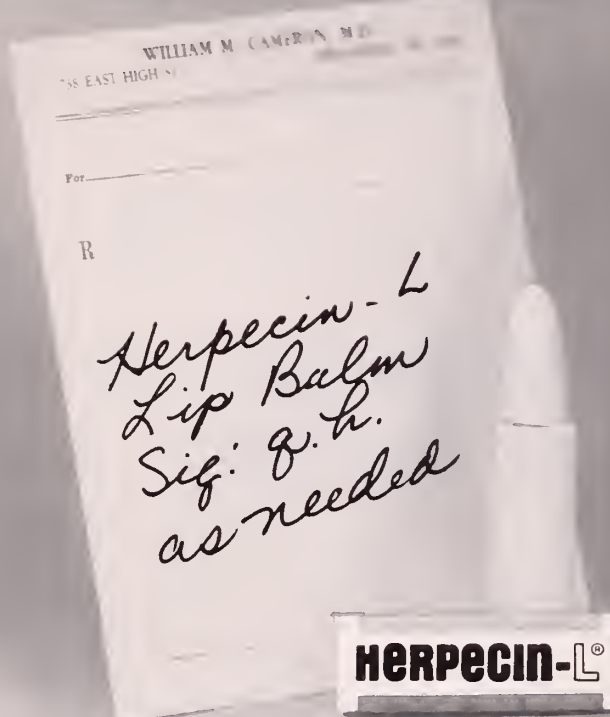
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Otitis media due to *S. pneumoniae*, *Haemophilus influenzae*, staphylococci, streptococci, and *Neisseria catarrhalis*.

Skin and skin structure infections caused by staphylococci and/or streptococci.

Bone infections caused by staphylococci and/or *Proteus mirabilis*. Genitourinary tract infections, including acute prostatitis, caused by *Escherichia coli*, *P. mirabilis*, and *Klebsiella* sp.

**Note:**—Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

**Contraindication:** Keflet is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

**Warnings:** BEFORE CEPHALEXIN THERAPY IS INSTITUTED, CAREFUL INQUIRY SHOULD BE MADE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO CEPHALOSPORINS AND PENICILLIN. CEPHALOSPORIN C DERIVATIVES SHOULD BE GIVEN CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS.

SERIOUS ACUTE HYPERSENSITIVITY REACTIONS MAY REQUIRE EPINEPHRINE AND OTHER EMERGENCY MEASURES.

There is some clinical and laboratory evidence of partial cross-allergenicity of the penicillins and the cephalosporins. Patients have been reported to have had severe reactions (including anaphylaxis) to both drugs.

Any patient who has demonstrated some form of allergy, particularly to drugs, should receive antibiotics cautiously. No exception should be made with regard to Keflet.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

**Usage in Pregnancy:**—Safety of this product for use during pregnancy has not been established.

**Precautions: General:**—Patients should be followed carefully so that any side effects or unusual manifestations of drug idiosyncrasy may be detected. If an allergic reaction to Keflet occurs, the drug should be discontinued and the patient treated with the usual agents (eg, epinephrine or other pressor amines, antihistamines, or corticosteroids).

Prolonged use of Keflet may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Keflet should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

Indicated surgical procedures should be performed in conjunction with antibiotic therapy.

As a result of administration of Keflet, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistix<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

**Usage in Pregnancy—Pregnancy Category B:**—The daily oral administration of cephalexin to rats in doses of 250 or 500 mg/kg prior to and during pregnancy, or to rats and mice during the period of organogenesis only, had no adverse effect on fertility, fetal viability, fetal weight, or litter size. Note that the safety of cephalexin during pregnancy in humans has not been established.

Cephalexin showed no enhanced toxicity in weanling and newborn rats as compared with adult animals. Nevertheless, because the studies in humans cannot rule out the possibility of harm, Keflet should be used during pregnancy only if clearly needed.

**Nursing Mothers:**—The excretion of cephalexin in the milk increased up to 4 hours after a 500-mg dose; the drug reached a maximum level of 4  $\mu$ g/mL, then decreased gradually, and had disappeared 8 hours after administration. Caution should be exercised when Keflet is administered to a nursing woman.

**Adverse Reactions: Gastrointestinal:**—Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely. The most frequent side effect has been diarrhea. It was very rarely severe enough to warrant cessation of therapy. Dyspepsia and abdominal pain have also occurred. As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

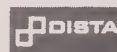
**Hypersensitivity:**—Allergic reactions in the form of rash, urticaria, angioedema, and, rarely, erythema multiforme, Stevens-Johnson Syndrome, or toxic epidermal necrolysis have been observed. These reactions usually subsided upon discontinuation of the drug. Anaphylaxis has also been reported.

Other reactions have included genital and anal pruritus, genital moniliasis, vaginitis and vaginal discharge, dizziness, fatigue, and headache. Reversible interstitial nephritis has been reported rarely. Eosinophilia, neutropenia, thrombocytopenia, and slight elevations in SGOT and SGPT have been reported.

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"Living in the city  
is lonely enough...  
with herpes it's like  
solitary confinement."

# ZOVIRAX<sup>®</sup> (acyclovir) CAPSULES

**Prevent genital herpes  
recurrences  
month after month with  
daily therapy.**

(In controlled studies, recurrences were  
totally prevented for 4 to 6 months in up to  
75% of patients.)

*Please see last page of this advertisement for  
brief summary of prescribing information.*



# ZOVIRAX<sup>®</sup> (acyclovir) CAPSULES

**Help free your  
patients from  
recurrences.**

## Daily therapy

Coping with genital herpes is rarely easy. For some, the worst part is the pain and discomfort of frequent attacks — month after month, year after year. For others, the emotional burden presents a more difficult problem, leading to social isolation, anxiety, and diminished self-esteem.

## Prevent or reduce recurrences

Although your patients have to live with herpes, they shouldn't have to suffer. Daily therapy with ZOVIRAX CAPSULES can help free them from the cycle of recurrent genital herpes. For many, one capsule three times a day can suppress recurrences completely while on therapy.

## Generally well tolerated

Daily therapy with ZOVIRAX CAPSULES is generally well tolerated. The most frequent adverse reactions reported during clinical trials were headache, diarrhea, nausea/vomiting, vertigo, and arthralgia.

The physical and emotional difficulties posed by genital herpes are unique for each patient. The frequency and severity of recurrent episodes, as well as the emotional impact of the disease, should be considered when selecting daily therapy with ZOVIRAX CAPSULES.

*Please see brief summary of  
prescribing information on next page.*





# Prevent recurrences month after month\*

# ZOVIRAX®

## (acyclovir) CAPSULES

### Brief Summary

**INDICATIONS AND USAGE:** Zovirax Capsules are indicated for the treatment of initial episodes and the management of recurrent episodes of genital herpes in certain patients.

The severity of disease is variable depending upon the immune status of the patient, the frequency and duration of episodes, and the degree of cutaneous or systemic involvement. These factors should determine patient management, which may include symptomatic support and counseling only, or the institution of specific therapy. The physical, emotional and psycho-social difficulties posed by herpes infections as well as the degree of debilitation, particularly in immunocompromised patients, are unique for each patient, and the physician should determine therapeutic alternatives based on his or her understanding of the individual patient's needs. Thus Zovirax Capsules are not appropriate in treating all genital herpes infections. The following guidelines may be useful in weighing the benefit/risk considerations in specific disease categories:

**First Episodes** (primary and nonprimary infections — commonly known as initial genital herpes):

Double-blind, placebo-controlled studies have demonstrated that orally administered Zovirax significantly reduced the duration of acute infection (detection of virus in lesions by tissue culture) and lesion healing. The duration of pain and new lesion formation was decreased in some patient groups. The promptness of initiation of therapy and/or the patient's prior exposure to Herpes simplex virus may influence the degree of benefit from therapy. Patients with mild disease may derive less benefit than those with more severe episodes. In patients with extremely severe episodes, in which prostration, central nervous system involvement, urinary retention or inability to take oral medication require hospitalization and more aggressive management, therapy may be best initiated with intravenous Zovirax.

### Recurrent Episodes:

Double-blind, placebo-controlled studies in patients with frequent recurrences (6 or more episodes per year) have shown that Zovirax Capsules given for 4 to 6 months prevented or reduced the frequency and/or severity of recurrences in greater than 95% of patients. Clinical recurrences were prevented in 40 to 75% of patients. Some patients experienced increased severity of the first episode following cessation of therapy; the severity of subsequent episodes and the effect on the natural history of the disease are still under study.

The safety and efficacy of orally administered acyclovir in the suppression of frequent episodes of genital herpes have been established only for up to 6 months. Chronic suppressive therapy is most appropriate when, in the judgement of the physician, the benefits of such a regimen outweigh known or potential adverse effects. In general, Zovirax Capsules should not be used for the suppression of recurrent disease in mildly affected patients. Unanswered questions concerning the human relevance of *in vitro* mutagenicity studies and reproductive toxicity studies in animals given very high doses of acyclovir for short periods (see Carcinogenesis, Mutagenesis, Impairment of Fertility) should be borne in mind when designing long-term management for individual patients. Discussion of these issues with patients will provide them the opportunity to weigh the potential for toxicity against the severity of their disease. Thus, this regimen should be considered only for appropriate patients and only for six months until the results of ongoing studies allow a more precise evaluation of the benefit/risk assessment of prolonged therapy.

Limited studies have shown that there are certain patients for whom intermittent short-term treatment of recurrent episodes is effective. This approach may be more appropriate than a suppressive regimen in patients with infrequent recurrences.

Immunocompromised patients with recurrent herpes infections can be treated with either intermittent or chronic suppressive therapy. Clinically significant resistance, although rare, is more likely to be seen with prolonged or repeated therapy in severely immunocompromised patients with active lesions.

**CONTRAINDICATIONS:** Zovirax Capsules are contraindicated for patients who develop hypersensitivity or intolerance to the components of the formulation.

**WARNINGS:** Zovirax Capsules are intended for oral ingestion only.

**PRECAUTIONS: General:** Zovirax has caused decreased spermatogenesis at high doses in some animals and mutagenesis in some acute studies at high concentrations of drug (see PRECAUTIONS — Carcinogenesis, Mutagenesis, Impairment of Fertility). The recommended dosage and length of treatment should not be exceeded (see DOSAGE AND ADMINISTRATION).

Exposure of Herpes simplex isolates to acyclovir *in vitro* can lead to the emergence of less sensitive viruses. The possibility of the appearance of less sensitive viruses in man must be borne in mind when treating patients. The relationship between the *in vitro* sensitivity of Herpes simplex virus to acyclovir and clinical response to therapy has yet to be established.

Because of the possibility that less sensitive virus may be selected in patients who are receiving acyclovir, all patients should be advised to take particular care to avoid potential transmission of virus if active lesions are present while they are on therapy. In severely immunocompromised patients, the physician should be aware that prolonged or repeated courses of acyclovir may result in selection of resistant viruses which may not fully respond to continued acyclovir therapy.

**Drug Interactions:** Co-administration of probenecid with intravenous acyclovir has been shown to increase the mean half-life and the area under the concentration-time curve. Urinary excretion and renal clearance were correspondingly reduced.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Acyclovir was tested in lifetime bioassays in rats and mice at single daily doses of 50, 150 and 450 mg/kg given by gavage. There was no statistically significant difference in the incidence of tumors between treated and control animals, nor did acyclovir shorten the latency of tumors. In 2 *in vitro* cell transformation assays, used to provide preliminary assessment of potential oncogenicity in advance of these more definitive life-time bioassays in rodents, conflicting results were obtained. Acyclovir was positive at the highest dose used in one system and the resulting morphologically transformed cells formed tumors when inoculated into immunosuppressed, syngeneic, weanling mice. Acyclovir was negative in another transformation system considered less sensitive.

In acute studies, there was an increase, not statistically significant, in the incidence of chromosomal damage at maximum tolerated parental doses of 100 mg/kg acyclovir in rats but not Chinese hamsters; higher doses of 500 and 1000 mg/kg were clastogenic in Chinese hamsters. In addition, no activity was found after 5 days dosing in a dominant lethal study in mice. In 6 of 11 microbial and mammalian cell assays, no evidence of mutagenicity was observed. At 3 loci in a Chinese hamster ovary cell line, the results were inconclusive. In 2 mammalian cell assays (human lymphocytes and L5178Y mouse lymphoma cells *in vitro*), positive responses for mutagenicity and chromosomal damage occurred, but only at concentrations at least 400 times the acyclovir plasma levels achieved in man.

Acyclovir has not been shown to impair fertility or reproduction in mice (450 mg/kg/day, p.o.) or in rats (25 mg/kg/day, s.c.). At 50 mg/kg/day s.c. in the rat, there was a statistically significant increase in post-implantation loss, but no concomitant decrease in litter size. In female rabbits treated subcutaneously with acyclovir subsequent to mating, there was a statistically significant decrease in implantation efficiency but no concomitant decrease in litter size at a dose of 50 mg/kg/day. No effect upon implantation efficiency was observed when the same dose was administered intravenously. In a rat peri- and postnatal study at 50 mg/kg/day s.c., there was a statistically significant decrease in the group mean numbers of corpora lutea, total implantation sites and live fetuses in the F<sub>1</sub> generation. Although not statistically significant, there was also a dose related decrease in group mean numbers of live fetuses and implantation sites at 12.5 mg/kg/day and 25 mg/kg/day, s.c. The intravenous administration of 100 mg/kg/day, a dose known to cause obstructive nephropathy in rabbits, caused a significant increase in fetal resorptions and a corresponding decrease in litter size. However, at a

maximum tolerated intravenous dose of 50 mg/kg/day in rabbits, there were no drug-related reproductive effects.

Intraperitoneal doses of 320 or 80 mg/kg/day acyclovir given to rats for 1 and 6 months, respectively, caused testicular atrophy. Testicular atrophy was persistent through the 4-week postdose recovery phase after 320 mg/kg/day; some evidence of recovery of sperm production was evident 30 days post-dose. Intravenous doses of 100 and 200 mg/kg/day acyclovir given to dogs for 31 days caused aspermato-genesis. Testicles were normal in dogs given 50 mg/kg/day, i.v. for one month.

**Pregnancy: Teratogenic Effects:** Pregnancy Category C. Acyclovir was not teratogenic in the mouse (450 mg/kg/day, p.o.), rat (50 mg/kg/day, s.c.) or rabbit (50 mg/kg/day, s.c. and i.v.). There are no adequate and well-controlled studies in pregnant women. Acyclovir should not be used during pregnancy unless the potential benefit justifies the potential risk to the fetus. Although acyclovir was not teratogenic in animal studies, the drug's potential for causing chromosome breaks at high concentration should be taken into consideration in making this determination.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Zovirax is administered to a nursing woman. In nursing mothers, consideration should be given to not using acyclovir treatment or discontinuing breastfeeding.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS — Short-Term Administration:** The most frequent adverse reactions reported during clinical trials were nausea and/or vomiting in 8 of 298 patient treatments (2.7%) and headache in 2 of 298 (0.6%). Less frequent adverse reactions, each of which occurred in 1 of 298 patient treatments (0.3%), included diarrhea, dizziness, anorexia, fatigue, edema, skin rash, leg pain, inguinal adenopathy, medication taste and sore throat.

**Long-Term Administration:** The most frequent adverse reactions reported in studies of daily therapy for 3 to 6 months were headache in 33 of 251 patients (13.1%), diarrhea in 22 of 251 (8.8%), nausea and/or vomiting in 20 of 251 (8.0%), vertigo in 9 of 251 (3.6%), and arthralgia in 9 of 251 (3.6%). Less frequent adverse reactions, each of which occurred in less than 3% of the 251 patients (see number of patients in parentheses), included skin rash (7), insomnia (4), fatigue (7), fever (4), palpitations (1), sore throat (2), superficial thrombophlebitis (1), muscle cramps (2), pars planitis (1), menstrual abnormality (4), acne (3), lymphadenopathy (2), irritability (1), accelerated hair loss (1), and depression (1).

**DOSAGE AND ADMINISTRATION: Treatment of initial genital herpes:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 10 days (total 50 capsules).

**Chronic suppressive therapy for recurrent disease:** One 200 mg capsule 3 times daily for up to 6 months. Some patients may require more drug, up to one 200 mg capsule 5 times daily for up to 6 months.

**Intermittent Therapy:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 5 days (total 25 capsules). Therapy should be initiated at the earliest sign or symptom (prodrome) of recurrence.

**Patients With Acute or Chronic Renal Impairment:** One 200 mg capsule every 12 hours is recommended for patients with creatinine clearance  $\leq 10$  ml/min/1.73 m<sup>2</sup>.

**HOW SUPPLIED:** Zovirax Capsules (blue, opaque) containing 200 mg acyclovir and printed with "Wellcome ZOVIRAX 200" - Bottles of 100 (NDC-0081-0991-55) and unit dose pack of 100 (NDC-0081-0991-56).

Store at 15°-30°C (59°-86°F) and protect from light.

\*In controlled studies, recurrences were totally prevented for 4 to 6 months in up to 75% of patients.

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# Highlights of KMA Board of Trustees



KMA Board of Trustees.

Members of the KMA Board of Trustees met August 5 and 6, 1987, to hear reports and make recommendations to the KMA House of Delegates which met in September. (A complete report of the KMA House of Delegates proceedings will be in the December *Journal* of KMA.)

### Report of KMA President

Richard F. Hensch, MD, President, reported he has attended meetings of the Kentucky Academy of Family Physicians, the Kentucky Society of Anesthesiologists, the Harrodsburg Rotary Club, KMA Trustees meetings and various medical staff meet-

ings to discuss the professional liability insurance issue. He stated there is a variation among doctors regarding the perception of the severity of their liability problem.

### KMA Auxiliary

Pamela Potter, Ashland, President of the Auxiliary, reported that several Kentucky County Auxiliaries won membership awards during the AMA Auxiliary Annual Meeting in Chicago. Boyd County was awarded the distinction of being the second highest per capita in contributions to the AMA-ERF in the United States. Mrs.

Potter also stated that the Auxiliary is working with KEMPAC on a voter registration drive.

### Peerview

Sidney R. Steinert, MD, Frankfort, Medical Director of Peerview, Inc., reported to the Board his concerns about new Medicare rules and Professional Review Organization (PRO) operations. He stated that recent congressionally-enacted review provision calls for a change in rural/urban peer review procedures. While critical of the administrative emphasis on process rather than quality of review, Doctor Steinert pledged his



**Wally O. Montgomery, MD, Chairman, Ad Hoc Committee on Professional Liability Insurance.**



**Additional Board members.**

efforts to make the review process as acceptable and tolerable as possible. He stated he has now accomplished the appointment of physician reviewers who are actively practicing in Kentucky.

### **PLI Campaign**

Wally O. Montgomery, MD, Chairman of the Ad Hoc Committee on Professional Liability Insurance, reported that the KMA PLI Campaign continues to focus on the 1988 Kentucky General Assembly. He reported that a patient brochure outlining the PLI problem is being mailed to all Kentucky physicians. He also

stated that packets are being prepared for members of the Kentucky General Assembly that will include the KMA Tort Reform package and an audio tape. Doctor Montgomery also noted that packets to assist individual physicians in their personal contacts with Legislators are being developed, and he encouraged each Board member to continue to address this issue at hospital staff meetings.

The next meeting of the KMA Board of Trustees is scheduled for December 16 and 17, 1987.



## Updates

### House Approves Aids Reports

In response to a request by the Legislature, the Board of Trustees appointed an Ad Hoc Committee to develop guidelines on AIDS. The body of the report developed addressed the legislative concerns of reporting AIDS cases, testing for the presence of the virus, education and counseling and physician education, and was titled, "AIDS Policy Issues." The Ad Hoc Committee also developed an extensive document titled, "AIDS Guidelines for Physicians."

The basic report sparked lengthy discussion by the Delegates relating to reporting of asymptomatic patients, but a final vote rejected such reporting.

The "AIDS Policy Issues" report will be sent to the appropriate Legislative committee to assist in any deliberations about the development of legislation. The "AIDS Guidelines for Physicians" is available to members on request.

### KMA Develops Indigent Care Plan

At its September meeting, the House of Delegates unanimously adopted a proposal for indigent medical care developed by an Ad Hoc Committee appointed by the Board of Trustees. The plan was prompted by a request from the

Health and Welfare Committee of the Kentucky General Assembly as well as by a continuing concern on the part of KMA and other organizations and agencies.

Incorporating ideas gained from KMA's Kentucky Physicians Care Program, the KenPAC portion of the Medicaid Program, and some aspects of programs operated elsewhere, the Indigent Care Plan's ultimate operation would depend on the designation of new funding sources. The Plan would offer eight basic medical services to individuals not eligible for Medicaid who had income up to 125% of the federal poverty level. Primary care physicians would act as case managers and be paid a monthly administrative fee. All providers would be reimbursed using current Medicaid formulas at levels determined by funds available. The program would be directed by a governor-appointed board composed of physicians, hospital administrators, and legislators.

Suggested funding sources are taxes on residential utilities' use, medical insurance premiums, medical insurance benefits, a payroll tax, a sales tax on all retail goods and services, raising the state tax on alcohol and tobacco products, and others.

While the Plan represents a significant good faith effort on the part of KMA, its implementation, or implementation of any indigent care proposal, is not expected to gain Legislative acceptance because of the funding.

## KMA Medical Student Section Active at UL and UK

Almost 150 medical students at the University of Louisville and University of Kentucky have joined their county medical society, KMA and AMA for the first time this year. This gain is due to extensive recruitment efforts by the Presidents of the KMA-MSS Chapters at each school, Terry Cleaver (UL) and Baretta Casey (UK), who will receive special recognition for their efforts during the Interim Meeting of the AMA-MSS held December 4-7 in Atlanta.

Activities undertaken by the Chapters include recruitment during Freshman Orientations, special programs and class meetings. Membership Committee Chairman Harold D. Haller, Sr, MD, spoke to UL freshmen on September 9, and Irene Roeckel, MD, a member of the Membership Committee, is serving as advisor to the UK Chapter of the KMA-MSS.

Three medical students from the University of Louisville (Terry Cleaver, Mark Hughes and Todd Pesavento) and four medical students from the University of Kentucky (Charles Ison, Judy Linger, Alice Miller and John Trump) represented their chapters at the AMA Medical Student Section Annual Meeting, held June 19-21 in Chicago. Excerpts from their reports follow:

Charles Ison — "I was given the feeling during the time that I attended the convention that we, as medical students, are an integral part of the medical profession now. . . and we have an obligation to help shape its future. The AMA-MSS, I have learned, provides us with an ample opportunity to do so."

Judy Linger — "I was glad to have the opportunity to be a part of an assembly whose purpose is to (1) have meaningful input into the decision and policymaking processes of the Association; (2) improve medical education and to further professional excellence; (3) involve medical students in addressing and solving the problems of health care and health care delivery; (4) provide a forum for the discussion and dissemination of information; (5) develop medical leadership; (6) initiate and ef-

fect necessary change; (7) promote high personal and professional ethics and a humanistic approach to the delivery of quality patient care; (8) promote activity within organized medicine on the local, state and national levels, and (9) work with other student groups to meet these objectives. I was proud to be involved with such a noble cause."

Alice Miller — "Particularly impressive was the evidence that medical students do have a voice in the policy-making process. At least as important as the political aspect of this meeting, however, was the personal satisfaction gained by meeting medical students from all over the U.S. Our goals are the same and by coming together at the convention, we were able to work out the best ways to reach them."



KMA Membership Committee Chairman Harold D. Haller, Sr, MD, (r) spoke with sophomore medical student Terry Cleaver, President of the UL KMA-MSS, prior to meeting with UL freshmen on September 9.



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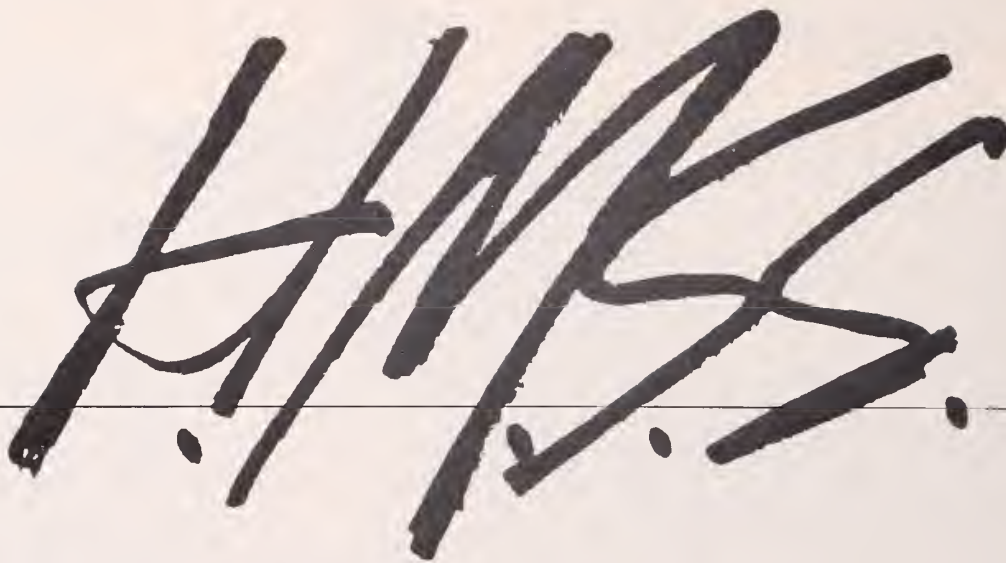
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**WARNINGS:** Dose should be adjusted to patient's needs. Excessive doses or too frequent administration can lead to profound water loss, electrolyte depletion, dehydration, reduction in blood volume and circulatory collapse with the possibility of vascular thrombosis and embolism, particularly in elderly patients.

Prevention of hypokalemia requires particular attention in patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis and ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, certain diarrheal states, or other states where hypokalemia is thought to represent particular added risk to the patients.

In patients with hepatic cirrhosis and ascites, sudden alterations of electrolyte balance may precipitate hepatic encephalopathy and coma. Treatment in such patients is best initiated in the hospital with small doses and careful monitoring of the patient's clinical status and electrolyte balance. Supplemental potassium and/or spironolactone may prevent hypokalemia and metabolic alkalosis in these patients. In cats, dogs and guinea pigs, Bumex has been shown to produce ototoxicity. Since Bumex is about 40 to 60 times as potent as furosemide, it is anticipated that blood levels necessary to produce ototoxicity will rarely be achieved. The potential for ototoxicity increases with intravenous therapy, especially at high doses.

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Hyperuricemia may occur. Reversible elevations of the BUN and creatinine may occur, especially with dehydration and in patients with renal insufficiency. Bumex may increase urinary calcium excretion. Possibility of effect on glucose metabolism exists. Periodic determinations of blood sugar should be done, particularly in patients with diabetes or suspected latent diabetes. Patients should be observed regularly for possible occurrence of blood dyscrasias, liver damage or idiosyncratic reactions.

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Volume 85, Number 12

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## PRESIDENT'S PAGE

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Once again we completed an outstanding annual meeting. The speakers were excellent, and many thanks are due to our Scientific Program Committee, under the able leadership of Max Crocker. The proceedings of the House of Delegates are printed in this edition of the *Journal*, and I would encourage each of you to read them.

The one discouraging note was that 22 County Societies were not represented at the Sessions. I would encourage my colleagues who accept the responsibility of being a delegate to fulfill that obligation. The policy and direction of this Association is determined by the House of Delegates, and every County Society should be represented in these deliberations.

I get the impression from some delegates that our Association is a closed organization, run by four or five people. This is absolutely untrue. We have an excellent and unselfish Board of Trustees who spend many dedicated hours during the course of the year,

all of it at their personal expense. Our committee system works long and hard on our behalf and does an excellent job. This is evident if you take the time to read the final reports of these committees.

The strength of any organization lies with individual members working cooperatively for the benefit of the group. We have a great Association, and I know I can depend on each of you for your support, willingness, and time to keep it that way. I appreciate the many letters and comments I have received supporting this concept.

The KMA Advisory Committee to Title XIX (Medicaid) met in October with Doctor Jim Holloway, Medical Director of the Medicaid Program. Jim has several new ideas on Medicaid reimbursement to make it more equitable, but still taking into account the amount of funds allocated to the program. One proposal that Doctor Holloway is pursuing, and trying to determine whether feasible or not, is the possibility of allocating the same

reimbursement for a procedure or visit, regardless of locale or the number of years an individual has been in practice. We need better statistics than are available at the present time in order to make a proper decision. However, my gut feeling is that a system paying each physician equally for the same service provided would be more appropriate than the present reimbursement system.

I would like to have your response on this issue, or any other matter of interest to you. Till next time.

**Donald C. Barton, MD**  
**KMA President**



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# Routine Intraoperative Cholangiography Is It Justified?

Joseph M. Casey, MD and John S. Spratt, MD

---

*Routine intraoperative cholangiography is widely accepted as a safe, expedient, and cost-effective procedure that has become a mandatory adjunct to simple cholecystectomy. Concerned that this principle may be overstated, we reviewed the literature and found few controlled, prospective studies on which to base such a strong statement. We asked community surgeons what their experiences have been with routine intraoperative cholangiography, calculated cost by examining an average community hospital and reimbursement company fee schedule, and reviewed literature that supports the use of selective intraoperative cholangiography.*

---

## Methods and Results

A questionnaire was sent to 77 community surgeons; 44 replied. The purpose of the questionnaire was to gain a sense of the complication rate, and the general usage and utility of routine intraoperative cholangiography.

Of the surgeons who responded, 30 (68%) did not perform routine intraoperative cholangiography; 14 (32%) did. More than half of those who do not do routine intraoperative cholangiography used these clinical indicators to perform one: (1) a large duct; (2) a history of jaundice or pancreatitis; (3) roentgenogram evidence of stones within the common bile duct; (4) palpable stones; (5) small stones within the gallbladder; (6) elevated alkaline phosphatase or hepatic transaminases;

(7) cholangitis; (8) biliary fistula; or (9) thickened common bile duct. Fewer than 25% felt that cloudy bile, acute cholecystitis, or age were valid indicators. By following the clinical criteria, three (10%) performed intraoperative cholangiography 0% to 10% of the time, 15 (50%) between 10% to 50% of the time, six (20%) between 50% to 90% of the time, and six (20%) between 90% to 100% of the time.

Of the 44 who responded, 22 (50%) had had one or more complications from an intraoperative cholangiogram. Although the survey was based purely on the surgeon's recollection, there were 121 complications (.88% complication rate) from 13,738 performed cholangiograms. Those most commonly reported were bile leak (34) and mild pancreatitis (34). Other complications included: moderate pancreatitis (12), severe pancreatitis (1), lethal pancreatitis (1), tears of the common duct (9), a stone forced into the common duct (8), reactions to the contrast (6), bile peritonitis (1), bile peritonitis with a subdiaphragmatic collection (1), and hemobilia (1).

For the percentage that anomalies of the biliary system were demonstrated, 31 (70%) replied only 0% to 10% and 13 (30%), 10% to 25% of the time. For 31 (77%) this was useful between 0% to 25% of the time; however, five (12%) found it useful 75% to 100% of the time.

Only one surgeon found that more than 15% of the patients had common duct stones. Eight (18%) found this true between 10% to 15% of the time; eight (38%), 5% to 10%; and 18 (41%), 0% to 5%.

Of the 30 who performed selective intraoperative cholangiography, 16 (53%) found occult stones 0% to 2% of the time, ten (33%) found them 2% to 5%, and four (13%), 5% to 10%. For the 14 who performed intraoperative cholangiography routinely, three (21%) found occult stones in 0% to 2% of their patients, nine

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## **INTRAOPERATIVE CHOLANGIOGRAPHY—Casey and Spratt**

(64%) in 2% to 5%, one (7%) in 5% to 10%, and one (7%) found occult stones in more than 10%. Both groups of surgeons claimed a retained stone rate between 0% and 5%.

Three (6%) surgeons found that it took more than 30 minutes to complete a cholangiogram; 13 (31%) between 20–30 minutes; 25 (56%) between 10–20 minutes, and for four (9%) less than 10 minutes.

A spokesperson with a major insurance company told us that the average physician reimbursement was \$130. The Radiology Department at our hospital added a procedural fee of \$71.95 and a radiologist's interpretation fee of \$28.80. An additional OR fee of \$30.50 for portable films gave a subtotal of \$131.25. OR time is set up in time blocks of \$200/30 minutes, while anesthesia time is charged at \$23/10 minutes. Hence, in our hospital an intraoperative cholangiogram requiring 20 minutes to perform could cost anywhere from \$307 to \$507 (\$130 surgeon fee, \$131.20 radiology fee, \$46 anesthesia fee, and either no additional cost or a \$200 charge if the cholangiogram takes longer, adding another 30-minute time block.)

Using the commonly quoted figure, occult stones are detected in 2.5% of patients by routine intraoperative cholangiography, although a review of the literature shows that this ranges from 0.9% to 38%.<sup>1,2,3</sup> Given that, one can see that between \$30,700 and \$50,700 will be spent on 100 patients to discover 2.5 patients with occult stones.

### **Discussion**

Few papers have alluded to any complications associated with intraoperative cholangiography.<sup>3,4</sup> Although the complication rate was low (.88%) and frequently minor, there was an occasional significant complication. Most were bile leaks resolved with continued drainage, but some caused peritonitis and abscess formation. Even the simple bile leak can prolong hospital stay. Tears of the common bile duct, stones forced into the duct, and the false-positive cholangiogram require surgical opening and manipulation of the common bile duct which increases morbidity and mortality rates.<sup>4</sup> The false-positive cholangiogram further detracts from the cost-benefit ratio. Although contrast reactions and pancreatitis were usually mild, they can cause death, as was seen in one individual.

Between \$12,000 to \$20,000 will be spent to discover an individual with an occult stone. The significance of this occult stone remains unproven. This expense

may be out of line with a reasonable cost-benefit ratio,<sup>5</sup> as compared with ERCP papillotomy which has reported success rates of 95%. Our costs are similar to other institutions that report spending between \$6,612 to \$12,500 per occult stone.<sup>5,6</sup> Gerber's prospective study proposed that selective intraoperative cholangiography could reduce the cholangiography rate by 40%, saving \$52 million/year.<sup>7</sup>

Over one half of the general surgeons interviewed did not practice routine intraoperative cholangiography. Most used a more selective approach, basing the use on common clinical criteria. The utilization was quite varied, however, ranging from a group of surgeons who performed cholangiography over 90% of the time to 11% who did it 0% to 10% of the time. Despite this range, all claimed to have a low rate of retained stones. Intraoperative cholangiography has earned its place as an invaluable adjunct to the surgeon who explores a common duct in patients exhibiting clinical indicators for common bile duct stones. The problem of the patient with no history of common duct pathology has not been adequately examined.

Surgeons who support a cholangiogram for all patients point to the detection rate of occult stones in approximately 2.5% of patients. Pathologists claim a 5% to 10% detection rate of occult stones in patients who have died from other causes.<sup>10</sup> One might be suspicious as to why these stones are indeed occult. Some studies have suggested that as few as 10% of the common duct stones will ever be symptomatic,<sup>2</sup> and that up to 50% of the retained stones will pass spontaneously within three months.

Massachusetts General Hospital and the New York Hospital - Cornell University group have reported a .3% retained stone rate each in using a selective approach.<sup>7</sup> Stark, in a retrospective review of 440 patients, found that in a group of 322 with no clinical criteria, only one patient had a common duct stone (.9% rate). This approximates the missed stone rate for routine intraoperative cholangiography (.2% to 2%).<sup>6</sup> Del Santo had no missed stones in a similar review of 195 patients.<sup>9</sup> In Gerber's study on using selective cholangiography, 438 patients did not undergo routine intraoperative cholangiography. One would have expected 11 patients with missed stones, yet only one was found and that was four years later.<sup>7</sup> In a prospective study, intraoperative cholangiography was purposefully performed on a group of 141 patients who failed to demonstrate any clinical indication for common bile duct

## INTRAOPERATIVE CHOLANGIOGRAPHY—Casey and Spratt

exploration; none had common duct pathology.<sup>10</sup> It is unreasonable to think that there would never be a case in which an intraoperative cholangiography could be omitted on the basis of sound clinical judgment.

### Conclusion

A survey was mailed to general surgeons in the community; 44 responded. Of those surveyed, 68% did not perform routine intraoperative cholangiography. Most said it was not helpful in defining the anatomy, that it took between ten and 30 minutes to perform, and that it carried a .88% complication rate. The majority of complications included bile leaks, pancreatitis, common bile duct tears, allergic reactions, and stones forced into the common bile duct. All of the surgeons stated that their retained stone rate was between 0–5%. The estimated cost ranged between \$307 to \$507 for a 20-minute cholangiogram.

After reviewing the current literature, we projected that of 100 patients undergoing routine operative cholangiography, between \$30,700 to \$50,700 will be spent to find some three patients with occult common duct stones, four patients will have an unnecessary common

duct exploration due to false-positive results, and one person will have a complication. We believe that liberal usage of selective intraoperative cholangiography is defensible on the grounds that it is equally safe, more efficient, and yields an acceptably low retained stone rate.

**References** 1. Mills JL, Beck DE, Marford FJ: Routine operative cholangiography. *Surg Gynecol Obstet* 161: 343–345, 1985. 2. Levine S, Lerner M, Leifer E, Lindheim S: Intraoperative cholangiography. *Ann Surg* 198: 692–697, 1983. 3. McCormick C, Bremner D, Thomson J, McNair T, Philip T: The operative cholangiogram. *Ann Surg* 180: 902–906, 1974. 4. White T, Hart M: Cholangiography and small duct injury. *Am J Surg* 149: 640–643, 1985. 5. Skillings J, Williams J, Hishaw JR: Cost effectiveness of operative cholangiography. *Am J Surg* 137: 26–31, 1979. 6. Stark M, Loughry W: Routine operative cholangiography with cholecystectomy. *Surg Gynecol Obstet* 151: 657–658, 1980. 7. Gerber A, Apt M: The case against routine operative cholangiography. *Surgery* 143: 734–736, 1982. 8. Taylor F: Routine operative cholangiogram. *Surg Gynecol Obstet* 136: 976–980, 1982. 9. Del Santo P, Kazarian K, Rogers F, Bevins P, Nall J: Prediction of operative cholangiography in patients undergoing elective cholecystectomy with routine liver junction chemistries. *Surgery* 98: 7–11, 1985. 10. Dietch E, Voci V: Operative cholangiography: The case for selective instead of routine operative cholangiography. *Am Surg* 48: 297–301, 1982.

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Henry I. Berman, Louisville	James Robert Hendon, Louisville	Edward H. Ray, Lexington
William H. Bizot, Louisville	Delbert G. Hoffman, Louisville	Fred C. Reynolds, Jr, Owensboro
Tim Lee Carter, Tompkinsville	William R. Kelsay, Jr, Monticello	J. Maxine Shenk, Covington
Sidney P. Cooper, Lexington	Homer Burl Mack, Louisville	Francis J. Smith, Crestwood
Douglas David, Louisville	Bruce B. Mitchell, Louisville	Dixie E. Snider, Springfield
William E. Davis, Paris	John Smith Newman, Henderson	Dorothy B. Worcester, Covington
William F. Farrell, Owensboro	Eugene J. Pal, Louisville	
James Sory Forbes, Hopkinsville	Norman Allen Parrott, Paducah	
Carl H. Fortune, Lexington	Daniel Nicholas Pickar, Louisville	
John F. Ganem, Phoenix, AZ	Alger B. Pigman, Hazard	
Milton M. Green, Hopkinsville	Otto Sherman Playforth, Lancaster	
Lyman Speer Hall, Campbellsville		

*List of names of deceased physicians available to the Journal as of August 1, 1987.*

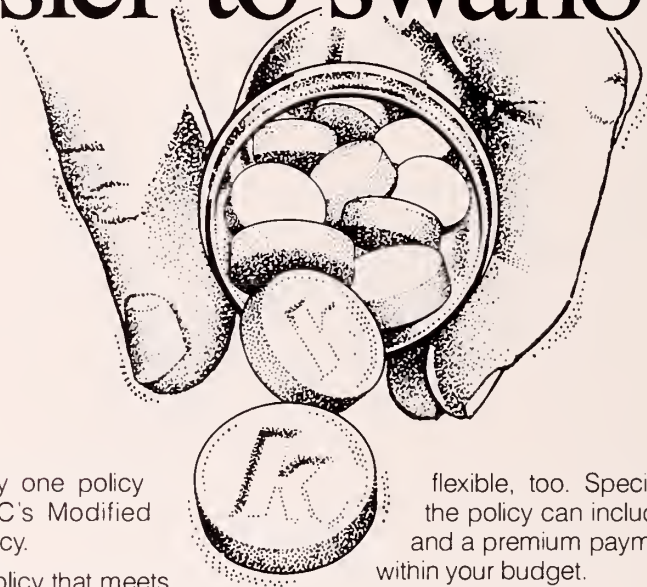
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*Now the labourer's task is o'er;  
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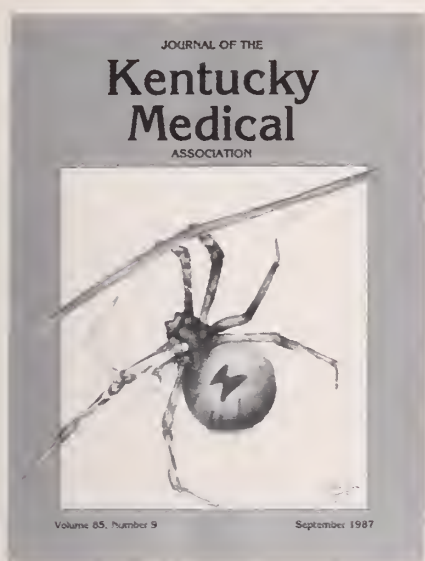
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**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions, nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

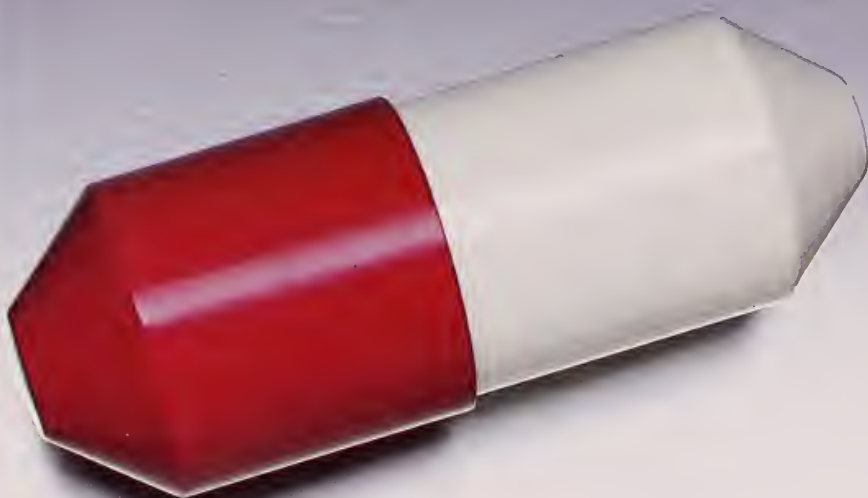
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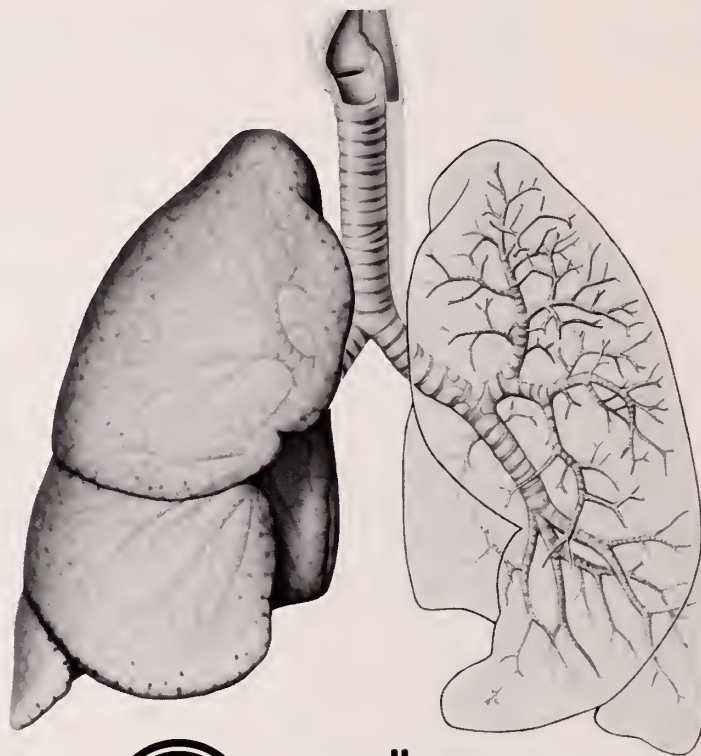
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**Note:** Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

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**Contraindication:**  
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Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

#### **Precautions:**

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
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**Adverse Reactions:** (percentage of patients)  
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- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nerv-

ousness, insomnia, confusion, hypertonía, dizziness, and somnolence have been reported.  
• Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

#### **Abnormalities in laboratory results of uncertain etiology**

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis, elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistix<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (glucose enzymatic test strip, Lilly).

[051787L]

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

**Eli Lilly Industries, Inc.**  
Carolina, Puerto Rico 00630



A woman with dark hair, wearing an orange long-sleeved shirt and dark pants, sits alone at a small white metal table in an outdoor cafe setting. The cafe has many similar empty tables and chairs with heart-shaped backs. The background is a dark wooden wall. The overall mood is one of solitude.

**"Living in the city  
is lonely enough...  
with herpes it's like  
solitary confinement."**

**ZOVIRAX<sup>®</sup>**  
**(acyclovir)**  
**CAPSULES**

**Prevent genital herpes  
recurrences  
month after month with  
daily therapy.**

(In controlled studies, recurrences were  
totally prevented for 4 to 6 months in up to  
75% of patients.)

*Please see last page of this advertisement for  
brief summary of prescribing information.*



# ZOVIRAX<sup>®</sup> (acyclovir) CAPSULES

**Help free your  
patients from  
recurrences.**

## Daily therapy

Coping with genital herpes is rarely easy. For some, the worst part is the pain and discomfort of frequent attacks — month after month, year after year. For others, the emotional burden presents a more difficult problem, leading to social isolation, anxiety, and diminished self-esteem.

## Prevent or reduce recurrences

Although your patients have to live with herpes, they shouldn't have to suffer. Daily therapy with ZOVIRAX CAPSULES can help free them from the cycle of recurrent genital herpes. For many, one capsule three times a day can suppress recurrences completely while on therapy.

## Generally well tolerated

Daily therapy with ZOVIRAX CAPSULES is generally well tolerated. The most frequent adverse reactions reported during clinical trials were headache, diarrhea, nausea/vomiting, vertigo, and arthralgia.

The physical and emotional difficulties posed by genital herpes are unique for each patient. The frequency and severity of recurrent episodes, as well as the emotional impact of the disease, should be considered when selecting daily therapy with ZOVIRAX CAPSULES.

*Please see brief summary of  
prescribing information on next page.*





# Prevent recurrences month after month\*

# ZOVIRAX®

## (acyclovir) CAPSULES

### Brief Summary

**INDICATIONS AND USAGE:** Zovirax Capsules are indicated for the treatment of initial episodes and the management of recurrent episodes of genital herpes in certain patients.

The severity of disease is variable depending upon the immune status of the patient, the frequency and duration of episodes, and the degree of cutaneous or systemic involvement. These factors should determine patient management, which may include symptomatic support and counseling only, or the institution of specific therapy. The physical, emotional and psycho-social difficulties posed by herpes infections as well as the degree of debilitation, particularly in immunocompromised patients, are unique for each patient, and the physician should determine therapeutic alternatives based on his or her understanding of the individual patient's needs. Thus Zovirax Capsules are not appropriate in treating all genital herpes infections. The following guidelines may be useful in weighing the benefit/risk considerations in specific disease categories:

**First Episodes** (primary and nonprimary infections — commonly known as initial genital herpes):

Double-blind, placebo-controlled studies have demonstrated that orally administered Zovirax significantly reduced the duration of acute infection (detection of virus in lesions by tissue culture) and lesion healing. The duration of pain and new lesion formation was decreased in some patient groups. The promptness of initiation of therapy and or the patient's prior exposure to Herpes simplex virus may influence the degree of benefit from therapy. Patients with mild disease may derive less benefit than those with more severe episodes. In patients with extremely severe episodes, in which prostration, central nervous system involvement, urinary retention or inability to take oral medication require hospitalization and more aggressive management, therapy may be best initiated with intravenous Zovirax.

### Recurrent Episodes:

Double-blind, placebo-controlled studies in patients with frequent recurrences (6 or more episodes per year) have shown that Zovirax Capsules given for 4 to 6 months prevented or reduced the frequency and or severity of recurrences in greater than 95% of patients. Clinical recurrences were prevented in 40 to 75% of patients. Some patients experienced increased severity of the first episode following cessation of therapy; the severity of subsequent episodes and the effect on the natural history of the disease are still under study.

The safety and efficacy of orally administered acyclovir in the suppression of frequent episodes of genital herpes have been established only for up to 6 months. Chronic suppressive therapy is most appropriate when, in the judgement of the physician, the benefits of such a regimen outweigh known or potential adverse effects. In general, Zovirax Capsules should not be used for the suppression of recurrent disease in mildly affected patients. Unanswered questions concerning the human relevance of *in vitro* mutagenicity studies and reproductive toxicity studies in animals given very high doses of acyclovir for short periods (see Carcinogenesis, Mutagenesis, Impairment of Fertility) should be borne in mind when designing long-term management for individual patients. Discussion of these issues with patients will provide them the opportunity to weigh the potential for toxicity against the severity of their disease. Thus, this regimen should be considered only for appropriate patients and only for six months until the results of ongoing studies allow a more precise evaluation of the benefit/risk assessment of prolonged therapy.

Limited studies have shown that there are certain patients for whom intermittent short-term treatment of recurrent episodes is effective. This approach may be more appropriate than a suppressive regimen in patients with infrequent recurrences.

Immunocompromised patients with recurrent herpes infections can be treated with either intermittent or chronic suppressive therapy. Clinically significant resistance, although rare, is more likely to be seen with prolonged or repeated therapy in severely immunocompromised patients with active lesions.

**CONTRAINDICATIONS:** Zovirax Capsules are contraindicated for patients who develop hypersensitivity or intolerance to the components of the formulation.

**WARNINGS:** Zovirax Capsules are intended for oral ingestion only.

**PRECAUTIONS: General:** Zovirax has caused decreased spermatogenesis at high doses in some animals and mutagenesis in some acute studies at high concentrations of drug (see PRECAUTIONS — Carcinogenesis, Mutagenesis, Impairment of Fertility). The recommended dosage and length of treatment should not be exceeded (see DOSAGE AND ADMINISTRATION).

Exposure of Herpes simplex isolates to acyclovir *in vitro* can lead to the emergence of less sensitive viruses. The possibility of the appearance of less sensitive viruses in man must be borne in mind when treating patients. The relationship between the *in vitro* sensitivity of Herpes simplex virus to acyclovir and clinical response to therapy has yet to be established.

Because of the possibility that less sensitive virus may be selected in patients who are receiving acyclovir, all patients should be advised to take particular care to avoid potential transmission of virus if active lesions are present while they are on therapy. In severely immunocompromised patients, the physician should be aware that prolonged or repeated courses of acyclovir may result in selection of resistant viruses which may not fully respond to continued acyclovir therapy.

**Drug Interactions:** Co-administration of probenecid with intravenous acyclovir has been shown to increase the mean half-life and the area under the concentration-time curve. Urinary excretion and renal clearance were correspondingly reduced.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Acyclovir was tested in lifetime bioassays in rats and mice at single daily doses of 50, 150 and 450 mg/kg given by gavage. There was no statistically significant difference in the incidence of tumors between treated and control animals, nor did acyclovir shorten the latency of tumors. In 2 *in vitro* cell transformation assays, used to provide preliminary assessment of potential oncogenicity in advance of these more definitive life-time bioassays in rodents, conflicting results were obtained. Acyclovir was positive at the highest dose used in one system and the resulting morphologically transformed cells formed tumors when inoculated into immunosuppressed, syngeneic, weanling mice. Acyclovir was negative in another transformation system considered less sensitive.

In acute studies, there was an increase, not statistically significant, in the incidence of chromosomal damage at maximum tolerated parenteral doses of 100 mg/kg acyclovir in rats but not Chinese hamsters; higher doses of 500 and 1000 mg/kg were clastogenic in Chinese hamsters. In addition, no activity was found after 5 days dosing in a dominant lethal study in mice. In 6 of 11 microbial and mammalian cell assays, no evidence of mutagenicity was observed. At 3 loci in a Chinese hamster ovary cell line, the results were inconclusive. In 2 mammalian cell assays (human lymphocytes and L5178Y mouse lymphoma cells *in vitro*), positive responses for mutagenicity and chromosomal damage occurred, but only at concentrations at least 400 times the acyclovir plasma levels achieved in man.

Acyclovir has not been shown to impair fertility or reproduction in mice (450 mg/kg/day, p.o.) or in rats (25 mg/kg/day, s.c.). At 50 mg/kg/day s.c. in the rat, there was a statistically significant increase in post-implantation loss, but no concomitant decrease in litter size. In female rabbits treated subcutaneously with acyclovir subsequent to mating, there was a statistically significant decrease in implantation efficiency but no concomitant decrease in litter size at a dose of 50 mg/kg/day. No effect upon implantation efficiency was observed when the same dose was administered intravenously. In a rat peri- and postnatal study at 50 mg/kg/day s.c., there was a statistically significant decrease in the group mean numbers of corpora lutea, total implantation sites and live fetuses in the F<sub>1</sub> generation. Although not statistically significant, there was also a dose related decrease in group mean numbers of live fetuses and implantation sites at 12.5 mg/kg/day and 25 mg/kg/day, s.c. The intravenous administration of 100 mg/kg/day, a dose known to cause obstructive nephropathy in rabbits, caused a significant increase in fetal resorptions and a corresponding decrease in litter size. However, at a

maximum tolerated intravenous dose of 50 mg/kg/day in rabbits, there were no drug-related reproductive effects.

Intraperitoneal doses of 320 or 80 mg/kg/day acyclovir given to rats for 1 and 6 months, respectively, caused testicular atrophy. Testicular atrophy was persistent through the 4-week postdose recovery phase after 320 mg/kg/day; some evidence of recovery of sperm production was evident 30 days post-dose. Intravenous doses of 100 and 200 mg/kg/day acyclovir given to dogs for 31 days caused aspermatogenesis. Testicles were normal in dogs given 50 mg/kg/day, i.v. for one month.

**Pregnancy: Teratogenic Effects:** Pregnancy Category C. Acyclovir was not teratogenic in the mouse (450 mg/kg/day, p.o.), rat (50 mg/kg/day, s.c.) or rabbit (50 mg/kg/day, s.c. and i.v.). There are no adequate and well-controlled studies in pregnant women. Acyclovir should not be used during pregnancy unless the potential benefit justifies the potential risk to the fetus. Although acyclovir was not teratogenic in animal studies, the drug's potential for causing chromosome breaks at high concentration should be taken into consideration in making this determination.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Zovirax is administered to a nursing woman. In nursing mothers, consideration should be given to not using acyclovir treatment or discontinuing breastfeeding.

**Pediatric Use:** Safety and effectiveness in children have not been established.

### ADVERSE REACTIONS—Short-Term Administration:

The most frequent adverse reactions reported during clinical trials were nausea and vomiting in 8 of 298 patient treatments (2.7%) and headache in 2 of 298 (0.6%). Less frequent adverse reactions, each of which occurred in 1 of 298 patient treatments (0.3%), included diarrhea, dizziness, anorexia, fatigue, edema, skin rash, leg pain, inguinal adenopathy, medication taste and sore throat.

**Long-Term Administration:** The most frequent adverse reactions reported in studies of daily therapy for 3 to 6 months were headache in 33 of 251 patients (13.1%), diarrhea in 22 of 251 (8.8%), nausea and vomiting in 20 of 251 (8.0%), vertigo in 9 of 251 (3.6%), and arthralgia in 9 of 251 (3.6%). Less frequent adverse reactions, each of which occurred in less than 3% of the 251 patients (see number of patients in parentheses), included skin rash (7), insomnia (4), fatigue (7), fever (4), palpitations (1), sore throat (2), superficial thrombophlebitis (1), muscle cramps (2), paronychia (1), menstrual abnormality (4), acne (3), lymphadenopathy (2), irritability (1), accelerated hair loss (1), and depression (1).

### DOSAGE AND ADMINISTRATION: Treatment of initial genital herpes:

One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 10 days (total 50 capsules).

### Chronic suppressive therapy for recurrent disease:

One 200 mg capsule 3 times daily for up to 6 months. Some patients may require more drug, up to one 200 mg capsule 5 times daily for up to 6 months.

**Intermittent Therapy:** One 200 mg capsule every 4 hours, while awake, for a total of 5 capsules daily for 5 days (total 25 capsules). Therapy should be initiated at the earliest sign or symptom (prodrome) of recurrence.

### Patients With Acute or Chronic Renal Impairment:

One 200 mg capsule every 12 hours is recommended for patients with creatinine clearance  $\leq 10$  ml/min/1.73 m<sup>2</sup>.

**HOW SUPPLIED:** Zovirax Capsules (blue, opaque) containing 200 mg acyclovir and printed with "Wellcome ZOVIRAX 200" - Bottles of 100 (NDC-0081-0991-55) and unit dose pack of 100 (NDC-0081-0991-56).

Store at 15°-30°C (59°-86°F) and protect from light.

\*In controlled studies, recurrences were totally prevented for 4 to 6 months in up to 75% of patients.

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THE AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION

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Last year, AKMA and the county auxiliaries raised \$50,818.04 for the American Medical Association Education and Research Foundation.



## PHYSICIANS, SCHEDULE SOME TIME FOR YOUR COUNTRY.

Many physicians would like to devote some time to their country in a local Army Reserve unit. We know that making a weekend commitment can be difficult for most physicians. So it is practical for the Army Reserve units to be flexible about time. It's worth discussing.

Incidentally, in addition to satisfying your own desire to serve your country, there are exceptional opportunities to do something totally different from a day-to-day routine. Opportunities to study new areas of medicine, meet new people in your specialty, and be a part of one of the world's most advanced medical teams.

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Your challenge could be the Army Reserve unit near you. It's a unit that requires the services of surgeons.

You may wish to explore the challenge of teaching in a major medical center. You may wish to explore the special challenges of your specialty in triage. Certainly you'll be confronted by challenges very different from your daily routine.

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The Army Reserve understands the time demands on a busy physician, so you can count on us to be totally flexible in making time for you to share your specialty with your country. We'll arrange your training program to work with your practice.

To find out about the benefits of serving with a nearby Army Reserve unit, we recommend you call our Army Medical Personnel Counselor.

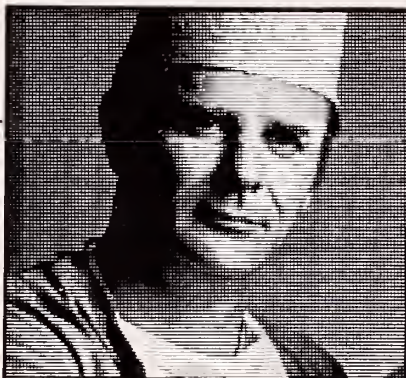
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One, time. We know how tough it is for a busy physician to make weekend time commitments. So we offer flexible training programs that allow a physician to share some time with his or her country. We arrange a schedule to suit your requirements.

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# 1987 KMA Annual Meeting



The first House of Delegates meeting at the Ramada Inn in Louisville.

### Elections

Bob M. DeWeese, MD, a Louisville general surgeon, was chosen KMA President-Elect during the 137th Annual Meeting of the KMA House of Delegates. Doctor DeWeese, a graduate of the University of Louisville School of Medicine, is Past President of the Jefferson County Medical Society. He is a former Trustee of the KMA 5th District and was Vice Chairman of the KMA Board of Trustees in 1987.

Nelson B. Rue, MD, former Trustee of the sixth District and three-term Chairman of the KMA Board of Trustees, was elected Vice President. Doctor Rue is a general surgeon practicing in Bowling Green.

S. Randolph Scheen, MD, a Louisville dermatologist, was reelected as Secretary-Treasurer of KMA. He also serves as Chairman of the KMA Awards Committee and as a member of the Judicial Council. Doctor Scheen is a re-

cipient of the KMA Distinguished Service Award.

Fred C. Rainey, MD, an Elizabethtown family practitioner, and Donald C. Barton, MD, a family physician from Corbin, were both reelected Delegates to the AMA. Wally O. Montgomery, MD, a Paducah surgeon, and Harold L. Bushey, MD, an internist from Barbourville, were reelected Alternate Delegates to the AMA.

In other elections, the KMA House

## ASSOCIATION

of Delegates elected Larry P. Griffin, MD, Louisville, Fifth District Trustee; Jerry W. Martin, MD, Bowling Green, Sixth District Trustee; and William H. Mitchell, MD, Richmond, Seventh District Trustee. Reelected to three-year terms by the House were William B. Monnig, MD, Erlanger, Eighth District Trustee, and Emanuel H. Rader, MD, Pineville, 15th District Trustee.

### President's Luncheon

During the President's Luncheon, Fred C. Rainey, MD, Elizabethtown, was awarded the Association's highest honor, the KMA Distinguished Service Award. Doctor Rainey, a family physician, was honored for his distinguished record in medical and civic

commitment, service and achievement. He has served as a District Trustee; President of the Kentucky Medical Association; KMA Delegate to the American Medical Association, which led to his appointment as Chairman of the Council on National Legislation; and Chairman of the KEMPAC Board, which subsequently led to his appointment to the AMPAC Board and election to the Chairmanship of AMPAC. He has served as President of the Kentucky Jaycees and Vice President of the US Jaycees.

The Dean of the University of Louisville Medical School, Donald R. Kmetz, MD, was the guest speaker for the President's Luncheon. Following the theme of the School's Sesquicen-

tennial Celebration, Doctor Kmetz's presentation was entitled, "University of Louisville School of Medicine, A 150 Year Tradition of Medical Excellence." He spoke of the prestigious history of high quality medical care and educational excellence, and of the bright and promising future of the School of Medicine.

### House of Delegates

During the first meeting of the House of Delegates on September 14, Phyllis Cronin, AKMA Past President, presented AMA/ERF checks to the two medical schools on behalf of the Auxiliary. Through the generosity of the medical community and many hours of volunteer effort, auxiliaries throughout



Left to Right: Nelson B. Rue, MD, Bowling Green, Vice President; S. Randolph Scheen, MD, Louisville, Secretary-Treasurer; Bob M. DeWeese, MD, Louisville, President-Elect; and Donald C. Barton, MD, Corbin, President.



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Chairman of the Board, Nelson B. Rue, MD, (L) administers the Presidential Oath-of-Office to Donald C. Barton, MD.



Fred C. Rainey, MD, was honored with the KMA Distinguished Service Award for being a leader in his profession as well as his community. Presenting the award is S. Randolph Scheen, MD, Chairman of the Awards Committee (L).



Bob M. DeWeese, MD, President-Elect, is escorted to the podium by Paul J. Parks, MD, Bowling Green (L), and Delmas M. Clardy, MD, Hopkinsville (behind Doctor DeWeese).



Nelson B. Rue, MD, Chairman of the Board, addresses the first House of Delegates. Doctor Rue was later elected Vice President at the second House of Delegates meeting.

## ASSOCIATION

the country raise funds annually for the AMA/ERF. In Kentucky, the funds are given proportionally as designated by the donors to the two medical schools. A check for \$15,463.11 was presented to the University of Kentucky College of Medicine, and \$26,262.69 was pre-

sented to the University of Louisville School of Medicine.

This year there were two recipients of the KMA Educational Achievement Award. The first recipient was John W. Greene, Jr, MD, Lexington. Doctor Greene achieved distinction for his

achievements in obstetrics and gynecology. Since 1963, he has served as Professor and Chairman of the OB/GYN Department at the University of Kentucky Medical School. He has been honored by receiving the Golden Apple Award presented by the Student American Medical Association, the Great Teacher Award presented by the University of Kentucky Alumni Association, and by the development of a gynecological society that bears his name. Doctor Greene has served as Chairman of the Maternal Mortality Committee for KMA since 1969. He is also on the test committee for OB/GYN of the National Board of Medical Examiners and has been an examiner for the Board of OB/GYNs.

The second recipient was Robert D. Acland, MD, Louisville. He was honored for his work in the extensive field of anatomy and microsurgery. Doctor Acland currently serves as Director of the Fresh Anatomy Study Laboratory at the University of Louisville and is a Professor of Surgery in Plastic and Reconstructive Surgery. He is recognized for his commitment and dedication in unselfishly sharing his knowledge and expertise with hundreds of physicians



Phyllis Cronin, Lexington, Past President of the AKMA, presents an AMA-ERF check to Donald R. Kmetz, MD, Dean of the U of L School of Medicine.



Emery A. Wilson, MD, Acting Dean of the U of K College of Medicine expressed his appreciation for the Auxiliary's AMA-ERF check.



KMA presented two Educational Awards for 1987. John W. Greene, Jr, MD, Lexington (L photo), is shown with his award, and Robert D. Acland, MD, Louisville (L), is shown in the right photo sharing his award with Frank Allen, his longtime associate.



## ASSOCIATION



**Ardis D. Hoven, MD**, an internist from Lexington, was Chairman of the AD Hoc Committee on the Development of AIDS Guidelines.



**J. Nicholas Terhune, MD**, Third District Trustee Member from Hopkinsville.



**Richard F. Hench, MD**, Lexington, addresses the first House of Delegates meeting.

from all over the world. He is a founding member of the International Society for Reconstructive Microsurgery and the American Society for Reconstructive Microsurgery. Doctor Acland accepted his award with a request that it be shared by his longtime associate at the Medical School, Mr. Frank Allen, Laboratory Research Technician III in the Microsurgery Laboratory.

Reports of the KMA Committees and Resolutions were introduced during the first House of Delegates meeting. During the second meeting the House considered 26 Resolutions and 50 reports.

Major actions of the House were:

1. Reaffirmed KMA's commitment to our Professional Liability Campaign and recommended that KMA include expert witness legislation in its 1988 legislative package, and also endorsed the following issues:
  - Amend Section 54 of the Kentucky Constitution to permit limits on noneconomic awards.
  - Mandate offset of payments received from collateral sources.

- Alter statute of limitations pertaining to minors.
- Imposition of reasonable fee schedule for attorneys.
- Permit periodic payments for future damages.
- Modify punitive damage awards.
- Explore alternate mechanisms for dispute resolutions.
- Review provisions of Constitution which permit judge made law.
- Joint and several liability proposals.

These are included in the legislative package of the Tort Reform Association of Kentucky (TRAK).

2. Adopted the following AIDS Guidelines:
  - The statutory and regulatory mechanisms for reporting of AIDS cases and individuals exhibiting evidence of prior exposure to the Human Immunodeficiency Virus (HIV) are in place; clarification of these statutes is now available from the Department for Health Services for physicians of Kentucky.

- Testing for the AIDS virus should be mandatory for donors of blood and blood fractions, organs, tissues, ova or sperm and, in accordance with Federal policy, immigrants to the United States, military personnel, and Federal and State prison inmates.
- Through education and counseling, individuals at risk of exposure to the AIDS virus should be encouraged to undergo voluntary testing for the presence of evidence of HIV infection; these groups include homosexual males, intravenous drug users, hemophiliacs, and sexual partners of these individuals.
- Testing and counseling services for individuals seeking this information must be made widely and readily available; in conjunction, complete confidentiality of counseling and test results must be ensured to remove the fear of discrimination that may prevent at-risk individuals from seeking counseling and testing.

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- Physicians throughout the state should be educated regarding counseling and testing, or referral of individuals seeking this information, in order that infected individuals may become aware of their infectivity and be counseled appropriately to prevent the spread of the disease.
- 3. Commended the Ad Hoc Committee on Indigent Medical Care and adopted program recommended by the Committee to resolve the indigent care problem.

Other House action included:

- Approved continuation of the Kentucky Physicians Care Program through December 31, 1988.
- Adopted a committee report that KMA go on record in concerned opposition to mandatory CME. Recommended that KMA work with the Board of Medical Licensure, medical societies, and insurance carriers to develop a CME program on risk management and quality assurance.

- Endorsed the concept of the living will and support of legislation if introduced.
- Approved introduction of legislation to regulate all-terrain vehicles.
- Reaffirmed support for mandatory use of lap-shoulder belt systems and requirements that they be standard equipment in rear outboard seating positions.
- Supported the concept of legislation prohibiting the sale and distribution of tobacco and to-



Salem M. George, MD, a family practitioner from Lebanon, serves on the Maternal and Child Health Committee.



Pamela H. Potter, President of the Auxiliary to KMA.



Newly installed KMA President Barton and Immediate Past President Hench.



Cecil D. Martin, MD, Seventh District Trustee from Carrollton (L), and K. Thomas Reichard, MD, Louisville, Chairman of the Committee on Claims and Utilization Review.



Cecil L. Grumbles, MD, Louisville OB/GYN (R), chats with Thomas R. Watson, MD, during a break in House action.



## ASSOCIATION

tobacco products to individuals under 16.

- Recommended consideration of legislation to deal with the protection of personal assets from liability in malpractice judgments.
- Supported implementation of a patient compensation system proposed by Carl L. Wedekind, Jr., President, KMIC.
- Recommended that Kentucky Blue Cross and Blue Shield delay implementation of Diagnostic Guidelines until further modifications have been suggested.
- Approved appointment of Peer-view Oversight Committee to represent the Association.
- Directed KMA to contact Kentucky's Congressional Delegation and HCFA to attempt to modify or mitigate retroactive denial notice of hospital admissions.
- Directed KMA to work with Kentucky Hospital Association, AMA and the Congressional Delegation to repeal or amend statutes compelling implementation of outpatient DRGs.

Five physicians were elected by the House of Delegates to serve on the 1988 Nominating Committee. Members elected were: Scott B. Scutchfield, Danville, Chairman; R. Gary Marquardt, Murray; Terrell D. Mays, Elizabethtown; William H. Mitchell, Richmond; and Susan H. Prasher, Ashland.

### Attendance

A near record attendance of 2,155 people, including 1,176 physicians, attended the 137th Annual Meeting of KMA in Louisville. The 1988 Annual Meeting will be held September 26-29 at the Hyatt Regency in Lexington.



Robert G. Cox, Executive Vice President, is recognized for his 25 years of service to KMA. He is pictured with Speaker of the House Peter C. Campbell, Jr, MD, Louisville (L), and Vice Speaker Danny M. Clark, MD, Somerset.



William B. Monnig, MD, Eighth District Trustee from Erlanger.



Donald C. Barton, MD, of Corbin assumes the Presidency of KMA.

## LETTERS

---

September 18, 1987

Richard F. Hench, M.D.  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, KY 40205

Dear Dr. Hench,

I want to thank the Kentucky Medical Association for the invitation to speak at the 137th Annual Meeting last week. I enjoyed the opportunity to exchange ideas with my colleagues in the Bluegrass State and to renew old acquaintances. The hospitality was outstanding.

Once again thank you for your kind invitation.

Sincerely,  
Michael D. Maves, M.D., F.A.C.S.  
Associate Professor,  
Otolaryngology - Head & Neck Surgery  
Director, Division Head & Neck Surgery

September 21, 1987

William T. Applegate  
Executive Director  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205

Dear Mr. Applegate:

Thank you for inviting me to the Kentucky Medical Association Meeting. I enjoyed seeing Dr. Vandiviere and colleagues, and hope that I contributed to the continuing education on AIDS.

Best regards.

Sincerely,  
Peter D. Walzer, M.D.  
Professor of Medicine  
Chief, Infectious Diseases  
VA Medical Center

September 17, 1987

Mr. William T. Applegate  
Executive Director  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, KY 40205

Dear Mr. Applegate:

I was most impressed by, and very much enjoyed attending, your recent Annual Meeting. Your kind hospitality was most appreciated. I hope our paths cross again in the near future.

Sincerely,  
Richard G. Roberts, M.D.  
University of Wisconsin Medical School  
Department of Family Medicine & Practice

September 21, 1987

Bill Applegate  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, KY 40205

Dear Bill:

I very much enjoyed the KMA meeting. I enjoyed meeting you personally. Jeff Callen was the perfect host. Thank you again.

Sincerely,  
Joseph L. Jorizzo, M.D.  
Professor and Chairman  
Department of Dermatology





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# Was Your Delegate Present?

## ROLL CALL

### 1987 House of Delegates

### KMA Annual Meeting

#### OFFICERS

		First Meeting	Second Meeting
Speaker	Peter C. Campbell, Jr.	Present	Present
Vice Speaker	Danny M. Clark	Present	Present
President	Richard F. Hench	Present	Present
President-Elect	Donald C. Barton	Present	Present
Vice-President	Thomas R. Watson	Present	Present
Secretary-Treasurer	S. Randolph Scheen	Present	Present
Delegate to the AMA	Fred C. Rainey	Present	.....
Delegate to the AMA	Donald C. Barton	Present	Present
Delegate to the AMA	Kenneth P. Crawford	Present	Present
Delegate to the AMA	Russell L. Travis	Present	Present
Alternate Delegate to the AMA	Robert R. Goodin	.....	Present
Alternate Delegate to the AMA	Wally O. Montgomery	Present	Present
Alternate Delegate to the AMA	Harold L. Bushey	Present	Present
Alternate Delegate to the AMA	Carl Cooper, Jr.	Present	.....

#### TRUSTEES

District			
First	John D. Noonan	Present	Present
Second	Albert H. Joslin	Present	Present
Third	J. Nicholas Terhune	Present	Present
Fourth	Lucian Y. Moreman, II	.....	Present
Fifth	Bob M. DeWeese	Present	Present
Sixth	Nelson B. Rue	Present	Present
Seventh	Cecil D. Martin	Present	Present
Eighth	William B. Monnig	Present	Present
Ninth	Kelly G. Moss	.....	.....
Tenth	Preston P. Nunnolley	Present	Present
Eleventh	Don E. Cloys	Present	Present
Twelfth	David C. Liebschutz	Present	Present
Thirteenth	Jerald M. Ford	Present	Present
Fourteenth	James R. Pigg	Present	Present
Fifteenth	Emmanuel H. Rader	Present	Present

#### ALTERNATE TRUSTEES

District			
First	James S. Gwinn, Jr.	.....	Present
Second	John W. McClellan	Present	Present
Third	N. H. Talley	Present	Present
Fourth	Salem M. George	Present	Present
Fifth	E. Dean Canan	.....	.....
Sixth	J. Michael Pulliam	Present	Present
Seventh	O. M. Patrick	.....	.....
Eighth	Donald J. Swikert	Present	Present
Ninth	Robert L. McKenney	Present	Present
Tenth	Thomas K. Slabaugh	Present	Present
Eleventh	William H. Mitchell	Present	Present
Twelfth	Scott B. Scutchfield	Present	Present
Thirteenth	Charles T. Watson	.....	.....
Fourteenth	Deborah L. McIntyre	.....	.....
Fifteenth	Paul R. Smith	Present	Present

#### PAST PRESIDENTS

Past President	Wally O. Montgomery	Present	Present
Past President	Charles C. Smith, Jr.	Present	.....
Past President	James B. Holloway	.....	.....
Past President	Dwight L. Blackburn	Present	.....
Past President	Ballard W. Cassidy	Present	.....

#### DELEGATES FIRST DISTRICT

		First Meeting	Second Meeting
BALLARD			
CALLOWAY	R. Gary Marquardt	Present	Present
	Dan Miller	Present	.....
CARLISLE			
FULTON	Robert T. Peterson, Jr.	.....	.....
GRAVES	Robert D. Fields	.....	.....
HICKMAN	Bruce C. Smith	.....	.....
LIVINGSTON	Stephen Burkhardt	.....	.....
MCCRACKEN	C. Dale Brown	Present	Present
	Harry Carlos	Present	Present
	Larry C. Franks	Present	Present
	Ronald L. Kelley	Present	Present
	Roland Myers	Present	.....
	Peter A. Ward	Present	Present
	H. W. Ford	Present	.....
MARSHALL			

#### SECOND DISTRICT

DAVIESS	John T. Houston	.....	Present
	John Jeffries	.....	Present
	R. Wathen Medley	Present	Present
	Wayne C. Myers	Present	Present
	Donald Neel	.....	Present
	Leslie M. Riherd	.....	Present
HANCOCK			
HENDERSON	Paul E. Moore	.....	.....
	Frank Sewell, Jr.	.....	.....
MCLEAN			
OHIO	Eric Norsworthy	Present	.....
UNION			
WEBSTER			

#### THIRD DISTRICT

CALDWELL	Nathaniel H. Talley	Present	Present
CHRISTIAN	Emmanuel J. Battah	Present	Present
	Delmas Clardy	Present	Present
	Frank Pitzer	.....	.....
	Gary V. James	.....	.....
	Wallace R. Alexander	.....	Present
	James M. Bowles	Present	Present
	Tristan K. Lineberry	Present	Present
	Rodger J. Zwemer, Jr.	Present	Present
CRITTENDEN			
HOPKINS			
LYON			
MUHLBERG	William L. Miller	.....	.....
TODD			
TRIGG	Eduardo Pavon	Present	Present

#### FOURTH DISTRICT

BRECKINRIDGE	James G. Sills	.....	.....
BULLITT	James R. Cundiff	Present	Present
GRAYSON	Ray A. Cave	Present	Present
GREEN	Doddachallor Shivakumar	.....	.....
HARDIN-LARUE	William Carney	Present	Present
	Marion A. Douglas, Jr.	.....	Present
	Wreno Hall	.....	Present
	Terrell Mays	.....	Present
HART	George Boeckman	.....	.....
MARION	Salem George	Present	Present
MEADE	Raymond L. Mathis	Present	.....
NELSON	Fredricka C. Lockett	.....	.....
TAYLOR	Henry F. Chambers	Present	Present
WASHINGTON	Suk K. Koh	Present	Present



## JEFFERSON

## FIFTH DISTRICT

William Stephen Aaron	Present	
Arnold M. Belker	Present	
Susan Berberich	Present	
Harold W. Blevins	Present	
Jerry B. Buchanan	Present	
Alvin M. Churney	Present	
Jerry N. Clanton	Present	
Stewart P. Cohen	Present	
Eugene H. Conner	Present	
John H. Doyle	Present	
Jeffrey Fadel	Present	
Henry D. Garretson	Present	
Darius Ghazi	Present	
S. Philip Greiver	Present	
Larry P. Griffin	Present	
Cecil L. Grumbles	Present	
Harold D. Haller	Present	
Martha Keeney Heyburn	Present	
Walter I. Hume, Jr.	Present	
Arthur H. Keeney	Present	
David W. Kinnaird	Present	
Joseph E. Kutz	Present	
Glenn E. Lambert, Jr.	Present	
Charles T. Lucas	Present	
Charles F. Mahl	Present	
Lazlo Makk	Present	
Russell T. May	Present	
Gorden T. McMurry	Present	
Kirk Morgan	Present	
William M. Moses	Present	
Morris Nacke	Present	
Syed M. Nawab	Present	
David H. Neustadt	Present	
Robert L. Nold, Sr.	Present	
Charles R. Oberst	Present	
Lynn L. Ogden, II	Present	
Lafayette G. Owen	Present	
Irving B. Perlstein	Present	
C. Kenneth Peters	Present	
Stephen Pollard	Present	
Robert G. Pope	Present	
Henry W. Post	Present	
James E. Redmon, Jr.	Present	
K. Thomas Reichard	Present	
Barton H. Reutlinger	Present	
Bernard F. Sams, Sr.	Present	
William J. Sandman, Jr.	Present	
G. Randolph Schrodt	Present	
Steven B. Self	Present	
William C. Templeton, II	Present	
Robert Tillet, Jr.	Present	
William P. VonderHaar	Present	
Sam D. Weakley	Present	
Barbara Weakley-Jones	Present	
Larry J. Wilson	Present	
C. Milton Young, III	Present	

## SIXTH DISTRICT

ADAIR  
ALLEN  
BARREN  
  
BUTLER  
CUMBERLAND  
EDMONSON  
LOGAN  
METCALFE  
MONROE  
SIMPSON

Billy Joe Parson	Present	
Earl P. Oliver	Present	
Daryl P. Harvey	Present	
William Marrs	Present	
Richard C. Wan	Present	
Samuel Rice	Present	
Omkar N. Bhatt	Present	
Lawrence P. Emberton	Present	
James E. Carter	Present	

## WARREN

John Downing	Present	Present
Paul J. Parks	Present	Present
James O. Willoughby	Present	Present

## SEVENTH DISTRICT

George F. Gilbert	Present	Present
Jeffrey Bisker	Present	Present
Harry Cowherd	Present	Present
Joseph J. Dobner	Present	Present
David W. Wallace	Present	Present
Edward G. Houchin	Present	Present
Ronald E. Waldrige	Present	Present
William K. Skaggs	Present	Present
Roderick H. MacGregor	Present	Present

## EIGHTH DISTRICT

John Ammon	Present	Present
Dwayne Smith	Present	Present
Gordon W. Air	Present	Present
Charles F. Allnutt	Present	Present
Thomas E. Bunnell	Present	Present
Fred Hausladen	Present	Present
Theodore H. Miller	Present	Present
Mark F. Pelstring	Present	Present
Jeffrey Russell	Present	Present
Donald Saelinger	Present	Present
Fred A. Stine	Present	Present
Raymond Timmerman	Present	Present

## NINTH DISTRICT

Robin A. Byron	Present	Present
J. Roy Biggs	Present	Present
Milton L. Brindley	Present	Present
Don R. Stephens	Present	Present
Audrey Spencer	Present	Present
Robert L. McKenney	Present	Present
Robert Culbertson	Present	Present

## TENTH DISTRICT

John R. Allen	Present	Present
William E. Blackburn	Present	Present
John W. Collins	Present	Present
John D. Cronin	Present	Present
W. Lisle Dalton	Present	Present
Michael E. Daugherty	Present	Present
Harold T. Faulconer	Present	Present
J. M. Fox	Present	Present
Allen E. Grimes, Jr.	Present	Present
Bill H. Harris	Present	Present
Ardis D. Hoven	Present	Present
Dennis B. Kelly	Present	Present
Edgar M. McGee	Present	Present
William D. Medina	Present	Present
William R. Meeker, Jr.	Present	Present
Andrew M. Moore, II	Present	Present
Franklin B. Moosnick	Present	Present
John Poundstone	Present	Present
Charles R. Sachatello	Present	Present
John E. Trevey	Present	Present
James M. Vascik	Present	Present
Gary R. Wallace	Present	Present
Emery Wilson	Present	Present

JESSAMINE	Phyllis Corbitt	.....	.....
WOODFORD	Norman S. Fisher	.....	.....

#### ELEVENTH DISTRICT

CLARK	Charles E. Terry	.....	.....
ESTILL	P. G. Raithatha	.....	.....
JACKSON	Arnold L. Taulbee	Present	.....
LEE	John M. Johnstone	Present	Present
MADISON	William H. Mitchell	Present	Present

MENIFEE	Lon E. Roberts, Jr.	.....	Present
MONTGOMERY	Mildred B. Gabbard	.....	.....
OWSLEY			
POWELL			
WOLFE	Paul F. Maddox	.....	.....

#### TWELFTH DISTRICT

BOYLE	David C. Liebschutz	Present	Present
	Scott B. Scutchfield	Present	Present
CASEY	Lewis E. Wesley	Present	Present
CLINTON	Michael Lee Cummings	.....	.....
GARRARD	Paul J. Sides	.....	Present
LINCOLN	Charles E. Crase	.....	.....

MCCREARY	Tom Dedman	Present	Present
MERCER	Donald E. Brown	Present	Present
PULASKI	Larry Nunemaker	Present	Present
	Danny Strunk	Present	Present

ROCKCASTLE	James E. Monin	Present	Present
RUSSELL	John Woodrow Simmons	Present	Present
WAYNE			

#### THIRTEENTH DISTRICT

BOYD	Walter Cawood	Present	.....
	Kenneth Hauswald	Present	Present
	Howard B. McWhorter	Present	Present
	John R. Potter	Present	Present
	Bruce Stapleton	.....	Present

CARTER	Brown L. Adkins	.....	.....
ELLIOTT	Charles R. Lambert	.....	.....
GREENUP	George P. Carter	Present	Present

LAWRENCE	George Bellamy	.....	.....
LEWIS	James M. Fisher	.....	.....
MORGAN	Marc Holbrook	Present	Present
ROWAN			

#### FOURTEENTH DISTRICT

BREATHITT	Peeter Jakobson	Present	Present
FLOYD	Chandra M. Varia	Present	Present
	Joseph H. Rapiet, Jr.	.....	.....

JOHNSON	Mary McCord	.....	Present
KNOTT	Rosalie M. Gaurano	.....	.....
LETCHER	Gregory D. Wells	.....	.....
MAGOFFIN	Eli C. Boggs	Present	.....
MARTIN	Russell H. Davis	Present	Present
PERRY	Oscar W. Thompson, III	Present	Present
PIKE	Mary L. Wiss	Present	Present

#### FIFTEENTH DISTRICT

BELL	Charles C. Moore, Jr.	Present	.....
	Kenneth W. Smith	.....	.....
CLAY	William E. Becknell, Sr.	.....	.....

HARLAN	Rachel Eubank	.....	Present
	Smith Howard	.....	Present
	Sandford Weiler	Present	.....
KNOX	Roger A. Acosta	Present	.....
LAUREL	Paul R. Smith	Present	Present
LESLIE			

WHITLEY	Roemer D. Pitman	.....	.....
	Carmel Wallace, Jr.	.....	Present

KMA Resident Physicians	Section-Anne Winterland	.....	Present
KMA Student Delegates-Terry	Cleaver-UL	Present	Present
	Baretta Casey-UK	Present	Present
KMA-HMSS-Alfred L. Thompson		.....	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 14 and September 16.

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1. Samples, complimentary, and other free copies:	538	554
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# *The Daniel M. Griffith, MD Memorial Meeting of the Kentucky Medical Association*

## *\*Digest of Proceedings of the Regular Session of the House of Delegates*

*Peter C. Campbell, Jr, MD, Louisville  
Speaker of the House, Presiding*

### **First Meeting September 14, 1987**

Peter C. Campbell, Jr, MD, Speaker of the House of Delegates, called the first Meeting of the 137th Session of the KMA House of Delegates to order at 9:00 AM on Monday, September 14, 1987, at the Ramada Inn East/Bluegrass EXPO Center. He introduced the new Vice Speaker of the House, Danny M. Clark, MD, Somerset, and KMA's new legal counsel, Charles J. (Mike) Cronan, IV. Following the Invocation given by Albert H. Joslin, MD, Owensboro, the Chairman of the Credentials Committee, Don R. Stephens, MD, Cynthiana, reported that a quorum was present.

A motion was made, seconded, and carried to approve the Minutes of the 1986 Session of the House of Delegates as published in the December 1986 *Journal of the Kentucky Medical Association*.

S. Randolph Scheen, MD, Louisville, Secretary-Treasurer, reported that the Scientific Session would begin at 8:50 AM on Tuesday, and the President's Luncheon would begin at 11:50 AM on Wednesday, at which time the new KMA President would be installed. Doctor Scheen reminded the Delegates that Reference Committees would convene at 2 PM on Monday.

Doctor Scheen asked the Delegates to stand for a moment of silence in memory of KMA members who had died since the 1986 Annual Meeting, and noted that among them was Thomas L. Heavern, Jr, MD, immediate past Vice Speaker of the House of Delegates.

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*\*Editorial Note: A tape recording was made of the two meetings of the House of Delegates, and any member who wishes to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recordings.*

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The Speaker announced that each Delegate had a booklet, prepared by the Rules Committee, outlining the rules the House should follow in its deliberations.

Phyllis Cronin, immediate Past President of the Auxiliary to KMA, presented AMA-ERF checks comprised of the funds the Auxiliary had raised to benefit Kentucky's medical schools. Emery A. Wilson, MD, Acting Dean, accepted a check for \$15,463.11 on behalf of the University of Kentucky College of Medicine; and Donald R. Kmetz, MD, Dean, accepted a check for \$26,262.69 on behalf of the University of Louisville School of Medicine.

KMA President, Richard F. Hench, MD, presented Educational Achievement Awards to John W. Greene, MD, Lexington, and to Robert D. Acland, MD, Louisville, who stated he would like to share the honor with his associate, Frank Allen.

President Hench then reported to the House members that KMA had been involved in a multitude of activities after the 1986 House of Delegates directed that tort reform be the current number one priority of the Association. Doctor Hench reported he continues to serve on the Kentucky Insurance and Liability Task Force, appointed by the 1986 Kentucky General Assembly, to study the general liability situation. He noted that the Task Force held 14 meetings and hearings across the state to receive testimony from insurance representatives, consumers, physicians, and attorneys.

Doctor Hench stated he felt a strong feeling had surfaced within the Task Force to impose a cap on damages awarded for "pain and suffering," and that he believed there was a reasonable chance that "periodic payment for future losses" would be recommended in the final report. He further reported that KMA completed a survey of Kentuckians that



## House of Delegates

illustrates a good understanding of the liability insurance problem and remedies that should be considered. Doctor Hensch noted that the liability insurance problem is the prototype of problems that physicians will continue to face, and that unified, organized medicine is essential.

Doctor Hensch noted that KMA was involved in several other important issues, and thanked Doctor Russell Travis, Lexington, for his efforts in the area of indigent medical care, and Doctor Ardis Hoven, Lexington, for her testimony in Frankfort regarding the AIDS problem.

Vice Speaker Clark introduced the other officers who presented their Reports. Each of the Reports was assigned to a Reference Committee:

Report Number		Reference Committee	
1	Report of the President Richard F. Hensch, Lexington	1	
2	Report of the President, Auxiliary to KMA Phyllis Cronin, Lexington	1	
3	Report of the President-Elect Donald C. Barton, Corbin	1	
4	Report of the Speakers, House of Delegates Peter C. Campbell, Jr, Louisville Danny M. Clark, Somerset	1	
5	Report of the Chairman, Board of Trustees Nelson B. Rue, Bowling Green	1	
6	Report of the Secretary-Treasurer S. Randolph Scheen, Louisville	1	
7	Report of the Editor A. Evan Overstreet, Louisville	1	
8	Report of the Delegates to AMA Fred C. Rainey, Elizabethtown	1	
9	Report of the Executive Vice President Robert G. Cox, Louisville	1	
10	Report of the Advisory Committee to AKMA Wally O. Montgomery, Paducah	1	
11	Kentucky Physicians Care Operating Committee Russell L. Travis, Lexington	1	
12	KMA Physicians Services, Inc. Nelson B. Rue, Bowling Green	1	
13	Kentucky Medical Insurance Company Ballard W. Cassady, Pikeville	1	
14	Scientific Program Committee Max A. Crocker, Lexington	2	
15	Scientific Exhibits Committee Richard A. Kielar, Lexington	2	
16	Continuing Medical Education Committee James E. Redmon, Jr, Louisville	2	
17	Council for Continuing Medical Education James E. Baumgarten, Louisville	2	
18	Cancer Committee P. Raphael Caffrey, Lexington	2	
19	Emergency Medical Care Committee E. Truman Mays, Somerset	2	
20	Physician Manpower Committee Robert R. Goodin, Louisville	2	
21	Interspecialty Council Paul J. Parks, Bowling Green	2	
22	Hospital Medical Staff Section William B. Monnig, Edgewood	2	
23	Maternal Mortality Study Committee John W. Greene, Jr, Lexington	3	
24	Committee on National Legislative Activities Fred C. Rainey, Elizabethtown	3	
25	Committee on State Legislative Activities Wally O. Montgomery, Paducah	3	
26	Committee on Impaired Physicians David L. Stewart, Louisville	3	
27	Committee on Care for the Elderly John C. Wright, II, Louisville	3	
28	Committee on Medical Insurance and Prepayment Plans Earl P. Oliver, Scottsville	4	
29	Committee on Claims and Utilization Review K. Thomas Reichard, Louisville	4	
30	Coordinating Commission on Peer Review Activities Earl P. Oliver, Scottsville	4	
31	Committee to Investigate Changing Trends in Medicine Nelson B. Rue, Bowling Green	4	
32	Committee on Maternal and Child Health Danny M. Clark, Somerset	5	
33	Committee on Medicare and Other Governmental Medical Programs Ardis D. Hoven, Lexington	5	
34	Committee on Health Planning Frederick A. Stine, Highland Heights	5	

## House of Delegates

			Resolu- tion	Submitted By	Subject	Reference Committee
35	Technical Advisory Committee on Physician Services (Title XIX) Harold L. Bushey, Barbourville	5	A	Fayette County Medical Society	Smoking in Hospitals	2
36	Committee on Community and Rural Health Don R. Stephens, Cynthiana	5	B	Board of Trustees	Peerview Oversight Committee	5
37	Committee on School Health, Physical Education, and Medical Aspects of Sports R. Quin Bailey, Danville	5	C	Campbell-Kenton County Medical Society	Obesity as a Disease	2
			D	Allen County Medical Society	Malpractice Insurance Tail Coverage	3
			E	Allen County Medical Society	Prorated Malpractice Insurance Coverage	3
38	Subcommittee on Youth Education R. Quin Bailey, Danville	5	F	Jefferson County Medical Society	Patient Compensation Fund	3
			G	Jefferson County Medical Society	Insurance Review Board	3
39	Advisory Committee to CHR Nelson B. Rue, Bowling Green	5	H	Jefferson County Medical Society	Trustee District Peer Review Appeals	4
			I	Jefferson County Medical Society	Medical Care Review	4
40	Judicial Council Earl P. Oliver, Scottsville	6	J	Jefferson County Medical Society	Managed-Care Plans	4
41	Rural Kentucky Medical Scholarship Fund Carolyn H. McKinley, Glasgow	6	K	Jefferson County Medical Society	Seat Belt Safety	3
			L	Resident Physicians Section	Access to Tobacco by Children	3
42	Physician-Attorney Liaison Committee Thomas M. Marshall, Louisville	6	M	Resident Physicians Section	Resident on Call Schedules	6
			N	Resident Physicians Section	Hospital Security	2
43	Membership Committee Harold D. Haller, Sr, Louisville	6	O	University of Kentucky Medical Scholarship Fund	Study of Rural Kentucky Medical Scholarship Fund	6
44	Committee on Constitution and Bylaws Robert L. McClendon, Louisville	6	P	Fayette County Medical Society	KMA Offices	6
45	McDowell House Board of Managers David W. Kinnaird, Louisville	6	Q	Fayette County Medical Society	Medicare Suspect Classification by KMAP	5
			R	Daviess County Medical Society	Inappropriate Requirements for Hospital Staff Members	2
46	Medical Student Section Evelyn Montgomery, Louisville Baretta Casey, Lexington	6	S	Jefferson County Medical Society	Reportability of Communicable Diseases	5
			T	Jefferson County Medical Society	Communicable Disease Screening	5
47	Resident Physicians Section Warren M. Cox, IV, Louisville	6	U	Floyd County Medical Society	Insurance Reimbursement and Liability Insurance Premiums	3
			V	Jefferson County Medical Society	Third-Party Encumbrances	4
			W	Board of Trustees	Medicare Assignment	5
			X	Board of Trustees	Medical Services for the Elderly and Indigent	5
			Y	Board of Trustees	Medicare Denial of Payment Notification	5
			Z	Board of Trustees	Medicare Outpatient Services	5
<b>Ad Hoc Committee Reports</b>						
	Ad Hoc Committee on Professional Liability Insurance Wally O. Montgomery, Paducah	3				
	Ad Hoc Committee on Indigent Medical Care Russell L. Travis, Lexington	3				
	Ad Hoc Committee on Development of AIDS Guidelines Ardis D. Hoven, Lexington	5				

### New Business

New Business was referred to the House by the Speaker and assigned to the Reference Committee indicated:

Doctor Clark announced the meeting locations for the Nominating Committee and for Trustee Districts electing Trustees and Alternate Trustees. He reminded the Delegates that the Nominating Committee would report at the close of the first Scientific Session on Tuesday morning.

The names of the members of the Nominating Committee were announced: Alvin M. Churney, MD, Louisville, Chairman; J. Roy Biggs, MD, Paris; Thomas C. Dedman,



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MD, Harrodsburg; Deborah L. McIntyre, MD, Hazard; and James O. Willoughby, MD, Bowling Green.

Nelson B. Rue, MD, Chairman of the Board of Trustees, made a presentation to Robert G. Cox, Executive Vice President, in appreciation for his 25 years of service to the Association.

Speaker Campbell adjourned the first Meeting at 10:55 AM.

### Second Meeting September 16, 1987

Speaker Campbell called the second Meeting of the 1987 Session of the KMA House of Delegates to order at 6:10 PM on Wednesday, September 16. Doctor Campbell asked Paul J. Parks, MD, Bowling Green, to give the Invocation, and the Chairman of the Credentials Committee, Don R. Stephens, MD, reported a quorum was present. Doctor Campbell announced that C. Dale Brown, MD, Paducah; Robert L. Nold, MD, Louisville; Donald J. Swikert, MD, Florence; and Samuel D. Weakley, MD, Louisville, would serve as Tellers.

Secretary-Treasurer Scheen recognized guests from neighboring state medical associations who had attended the Annual Meeting. Included were Shirley Thompson Khalouf, MD, President, Indiana State Medical Association; D. Ross Irons, MD, President, Ohio State Medical Association; Cordell A. De La Pena, MD, President, West Virginia State Medical Association; Richard L. Fields, MD, President, The Medical Society of Virginia; and Edward J. Fesco, MD, President, Illinois State Medical Society.

### Unfinished Business

Board Chairman Rue presented a motion on behalf of the Board that J. Campbell Cantrill, MD, Georgetown, be elected to another four-year term on the KMA Judicial Council. The motion was seconded from the floor and carried.

*Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.*

### REPORT OF REFERENCE COMMITTEE NO. 1

John M. Johnstone, MD, Richmond  
Chairman

Reference Committee No. 1 considered the following Reports:

1. Report of the President
2. Report of the President, Auxiliary to KMA
3. Report of the President-Elect
4. Report of the Speakers, House of Delegates
5. Report of the Chairman, Board of Trustees *except* for the Reports of the following Ad Hoc Committees:  
Ad Hoc Committee on Professional Liability Insurance (referred to Reference Committee No. 3)  
Ad Hoc Committee on Indigent Medical Care (referred to Reference Committee No. 3)  
Ad Hoc Committee on the Development of AIDS Guidelines (referred to Reference Committee No. 5)
6. Report of the Secretary-Treasurer
7. Report of the Editor
8. Report of the Delegates to AMA
9. Report of the Executive Vice President
10. Report of the Advisory Committee to AKMA
11. Report of the Kentucky Physicians Care Operating Committee
12. Report of the KMA Physicians Services, Inc.
13. Report of the Kentucky Medical Insurance Company

### ITEMS FOR CONSENT

Reference Committee No. 1 reviewed the following items and recommends they be filed as indicated, by the consent of the House without discussion:

2. Report of the President, Auxiliary - filed
3. Report of the President-Elect - filed
4. Report of the Speakers, House of Delegates - filed
5. Report of the Chairman, Board of Trustees *except* for the Reports of the following Ad Hoc Committees:  
Ad Hoc Committee on Professional Liability Insurance (referred to Reference Committee No. 3)  
Ad Hoc Committee on Indigent Medical Care (referred to Reference Committee No. 3)  
Ad Hoc Committee on the Development of AIDS Guidelines (referred to Reference Committee No. 5) - filed
6. Report of the Secretary-Treasurer - filed
7. Report of the Editor - filed
8. Report of the Delegates to AMA - filed
9. Report of the Executive Vice President - filed
10. Report of the Advisory Committee to AKMA - filed
12. Report of the KMA Physicians Services, Inc. - filed
13. Report of the Kentucky Medical Insurance Company - filed

### **Report of the President, Auxiliary to KMA**

With a theme of "Catch the Winning Spirit," the AKMA year has been exciting and stimulating. It was our intention to share with all the value of Auxiliary membership.

From Ashland to Paducah, the "spirit" prevailed not only in Auxiliary endeavors, but in all phases of community activities. We asked our members to record the time given as volunteers, not only for Auxiliary projects, but also for time shared in community activities. A total of 59,406 hours was reported by ten counties. In Hopkins County, 11,659 hours were logged by 45 members for an average of 259 hours per person. Another county, with 17 members reporting 8,386 hours, averaged 493 hours per person. Based on the recorded volunteer hours and the number of Auxiliaries taking part, we were assured that "AKMA is Giving Medicine A Good Name" and wherever volunteer activities are happening, Auxiliary members are there leading, caring, and sharing their time and talents.

The Auxiliary has continued its support of the McDowell House and the Lexington and Louisville Ronald McDonald Houses.

The Health Careers Loan Fund has continued to grant monies for health career education. We assisted 28 students this year.

Our Health Projects have included a wide scope of activities, depending on community need. In coalition with the Christian Appalachian Project, we were given \$30,000 worth of children's books and records. These have been distributed by Auxiliaries to children's centers, the Ronald McDonald Houses, and pediatric floors and waiting rooms of hospitals throughout the state. Even though it was not a legislative year, we were able to create a phone bank in eleven of our counties. This alert system, dubbed as Leg Talk, was a means to inform our members on current legislation and action to be taken.

Our AMA-ERF contributions were more than \$50,000 this year. We were pleased to have two counties, Boyd and Jefferson, raising more than \$10,000 each. The AKMA also achieved the third largest per capita contribution in the country. Boyd County was recognized for raising the second largest per capita contribution by a county in the AMAA.

Although membership was down, several national recognitions were made to the AKMA. Awards were presented to the State Auxiliary for more than a 75% unified membership, to Pennyriple County for recruiting and forming a new Auxiliary, and to Boyle County for more than a 100% increase in membership.

Many leadership training opportunities were offered throughout the year, with a large number of Auxiliaries taking part. Several national leaders visited Kentucky and seven

county presidents-elect attended the AMAA Confluences held in Chicago.

Convention 1987 was held in Lexington as the culminating event for the Auxiliary year. It was a year to "Catch the Winning Spirit." Our members have "Given Medicine A Good Name" as they have shared their time and talents. It has been my distinguished privilege to serve as 62nd President of the Auxiliary to the Kentucky Medical Association. I wish to extend my sincere thanks to the KMA members and staff for their loyal support.

**Phyllis Cronin  
President**

### **Report of the President-Elect**

I have been honored to serve the Association this year as President-Elect. There are many issues raised and decisions made on a day-to-day basis in the Association, as well as efforts devoted to the ongoing programs and programs started this year. Under the able leadership of President Dick Hench and the 1986-87 Board of Trustees, much has been accomplished.

We are now entering the crucial phase of the Professional Liability Campaign. All of us have a very busy year ahead. We have pointed out many times that if KMA is to be successful, all members of our Association must be informed and involved. You, the Delegates, are the representatives of your county society, and it is your responsibility to make sure that members are kept well informed and working. This is essential if we are to pass meaningful liability legislation during the upcoming Session.

Another hot issue facing KMA during the Legislative Session will be indigent care. The Board of Trustees and Officers, recognizing this fact, appointed an Ad Hoc Committee on Indigent Medical Care under the able leadership of Russ Travis. Because of time constraints imposed by the Interim Committee System in Frankfort, we were asked to present our case in July, before the House of Delegates could consider the Ad Hoc Committee's recommendations. I sincerely request that you support the Ad Hoc Committee's proposals and endorse them at the Annual Meeting. In these difficult days, when legislation moves quickly, we must be a leader, not a follower. However, it is important that we impress upon everyone that indigent care is a societal problem and, therefore, the resolution of the problem must be borne equally by *all* of society, not just by the providers of medical care.

Our membership showed growth this past year under the leadership of Membership Chairman Harold Haller, whose



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Committee has been very active and successful. During 1986-87, it targeted nonmember female physicians for special emphasis. Approximately one-half of the female physicians in Kentucky are nonmembers. We also need to focus on the foreign medical graduate (FMG). FMGs comprise approximately 17% of the physicians in the state, but only 62% of these physicians belong to KMA.

As directed by the 1986 House of Delegates, your Executive Committee met with representatives of Blue Cross and Blue Shield of Kentucky twice in January concerning the issue of the three payment areas. I sincerely wish that I could report to you that we were successful in accomplishing the House's wishes; unfortunately, I cannot. According to Blue Cross and Blue Shield management, marketing and competition dictate the retention of three payment areas. Statistics were presented that indicated the gap among the three payment areas narrows each year. They also promised to see if some areas could be, and probably should be, upgraded. I promise to continue my efforts to correct this inequity.

Another major issue facing the Kentucky General Assembly is mandatory participation in Medicaid tied to licensure. Since this measure passed in Massachusetts, it has spread like cancer. Similar legislation has been introduced in approximately 15 other states, and has passed in some form in three states. I hope Kentucky will be last in *this*, but I fear otherwise.

There are many problems, too numerous for me to recount here, that our beloved profession will encounter in the coming year. I know that with your support and dedication, we will have a successful year. I promise to serve you to the best of my ability.

Thank you, again, for giving me this honor to serve you, our patients, and our profession.

**Donald C. Barton, MD**  
**President-Elect**

### **Report of the Speakers, House of Delegates**

Your Speakers would like to welcome you to the 137th Annual Meeting of the Association. Your thoughts and input on many important issues that need address are vital. Likewise, we urge you to share the material contained in the Delegates' packet with your peers so that their views can be ascertained, and all members are encouraged to attend the meeting to voice their concerns.

There are some issues that require your specific attention that should be noted. Of particular interest is the Report of

the Ad Hoc Committee on Professional Liability Insurance, which will be considered by Reference Committee No. 3. The Professional Liability Insurance (PLI) campaign is the Association's major activity for this year, and your support and involvement are needed.

Also assigned to Reference Committee No. 3 is the Report of the Ad Hoc Committee on Indigent Medical Care. KMA has been a leader in this state and nationally with the Kentucky Physicians Care (KPC) program. However, the KPC program is not available to all of the Commonwealth's citizens who are medically indigent. To answer this concern, as well as to respond to the probable activities of the Kentucky General Assembly (KGA), the Indigent Care Report was developed.

In response to a request by the KGA and to suit the needs of all practicing physicians, an ad hoc committee was appointed to develop guidelines on AIDS, and its Report will be heard by Reference Committee No. 5. This matter affects all Kentucky citizens, and KMA and physicians are being asked to and should take the lead in combating this grave problem.

In addition to these special issues, other matters of importance are contained in the various committee reports and Resolutions, and your sincere attention is requested in helping to develop policies.

Discussion of other items is solicited from all Delegates and members, and your Speakers would point out that Resolutions must be received in the KMA Headquarters seven (7) days prior to the meeting. Otherwise, Resolutions may be submitted during the first meeting of the House if a majority vote approves submission. The Rules Committee and the Speakers will be available throughout the meeting to counsel any Delegate on issues that may arise, and Delegates are urged to seek any assistance required.

On a personal note, I am sure that every member of this Association joins me in expressing sorrow over the passing of Thomas L. Heavern, MD, the immediate past Vice Speaker. Tom was an inspiration and guiding hand to this House of Delegates, KMA, and the AMA House of Delegates for many years, and his passing is greatly lamented. We will miss his steadfast character and sincerity of purpose.

I am sure, too, that the House joins me in welcoming Danny Clark as our new Vice Speaker, and I look forward to working with him and sharing the trust that you have placed in both of us.

**Peter C. Campbell, Jr, MD**  
**Speaker**  
**Danny M. Clark, MD**  
**Vice Speaker**

### Report of the Chairman, Board of Trustees

As I come to the close of my third year as Chairman of your Board of Trustees, I recognize many things for which I am grateful. The privilege of serving as a Trustee for six years on the Board with such an outstanding group of colleagues is quite significant to me, and the opportunity to serve as the Board Chairman for one-half of that time makes one quite humble. I have learned much and can assure the membership they are not only well represented by their elected Board members, but they each have earned full respect, faith, and appreciation that should be accorded them by every physician in Kentucky.

Times are tough, our problems are complex, and true solutions are scarce, to say the least. On behalf of the membership, I say to the members of the Board a special "thanks" for an excellent job throughout the year and for your confidence in once again having me serve as your Chairman.

The House of Delegates voted last September that Professional Liability Insurance (PLI) would be our number one priority this past year . . . and it certainly has been. I won't report on it in detail because you will read about the many ongoing activities in the Report of the new Ad Hoc Committee on PLI and in other reports. Suffice it to say we have been and are working with allied groups, coalitions, the Tort Reform Association of Kentucky, legislative groups, specialty groups, county societies, and ad infinitum. We are putting special staff efforts into PLI, special seminars have been conducted, and we have retained two public relations firms to help design and coordinate our campaign. The main ingredient of this campaign, especially as we approach the 1988 Kentucky General Assembly, must be the dedication, commitment, and total effort of every Kentucky physician.

Professional liability has supplemented our other programs this year, which included a larger number of well-attended seminars and workshops than usual. The Kentucky Physicians Care Program has been ongoing, and approximately 50 committees have been meeting throughout the year implementing projects and programs to help us and our patients in our daily lives. Their reports speak for themselves, but to those committee members and chairmen I also say a special "thank you."

Your officers have had numerous meetings with outside groups this year. KMA's representation of the profession with allied groups, third parties, governmental agencies, the business community, and the public is ongoing and is essential to the lifeblood of our organization. The Kentucky Medical Association is the only organization in this state that we, as physicians, all have to collectively support that

can represent the entire medical profession. Don't be bashful about that support and if you run across a nonmember, urge him to become one of us. In these difficult times, power comes from being united. Our membership will hit another all-time high this year, but we still have a significant number of our colleagues who have not elected or been asked to be a part of us. Please go ask them.

Our finances remain in good condition and the special two-year dues increase for professional liability insurance has offered us the opportunity to do things we couldn't have done otherwise—retaining PR firms as just one example. The remaining funds from that increase this year and those for next year will allow us to generate a major effort as we prepare for and go through the Kentucky General Assembly.

The KMA Legal Trust Fund currently totals \$116,824.75. During this Associational year, \$4,166.97 was expended from the fund, as of the writing of this report.

The following summary of Board meetings provides a sampling of the scope of your Board's activities this year. Complete Minutes of all Board of Trustees and Executive Committee meetings will be provided to Reference Committee 1.

Again, as I complete my two terms as Trustee, I want to express my very deepest gratitude to the Board members, staff, committee members, the House of Delegates, and individual members across the state, both for the support I have received and for efforts they have expended.

### Summary of Board Meetings

#### First Meeting, September 25, 1986

Acting as temporary Chairman, KMA Secretary-Treasurer S. Randolph Scheen, MD, introduced the newly elected members of the Board and the new Officers: Donald C. Barton, MD, Corbin, President-Elect; Thomas R. Watson, MD, Louisville, Vice President; Danny M. Clark, MD, Somerset, Vice Speaker, House of Delegates; J. Nicholas Terhune, MD, Hopkinsville, Trustee, Third District; Lucian Y. Moreman, MD, Elizabethtown, Trustee, Fourth District; David C. Liebschutz, MD, Danville, Trustee, Twelfth District; and James R. Pigg, MD, Pikeville, Trustee, Fourteenth District.

The Board elected the Executive Committee members to serve with the President, President-Elect, Vice President, and Secretary-Treasurer for the 1986-87 Associational year. Nelson B. Rue, MD, was re-elected Chairman of the Board, and Bob M. DeWeese, MD, Louisville, was elected Vice Chairman. Albert H. Joslin, MD, Owensboro, and William B. Monnig, MD, Edgewood, were named as Trustees-at-Large.



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It was noted that the KMA Executive Committee members also serve as the Board of Directors of KMA Physicians Services, Inc. (KMA's holding company).

The Board members made changes to the Kentucky Foundation for Medical Care Board of Directors in accordance with KFMC's Bylaws, appointed KMA Committees for the 1986-87 Associational year, and appointed Donald C. Barton, MD, to the Health Care Access Foundation Board to replace Charles C. Smith, Jr, MD. The Board voted to hold the 1987 Annual Meeting at the Ramada Inn/Bluegrass EXPO Center in Louisville.

### **Second Meeting, December 17-18, 1986**

The Board of Trustees held its second meeting of the Associational year at the Headquarters Office on December 17-18, 1986.

Following the reports of the KMA and AKMA Presidents, Senior Delegate to AMA, President of the Board of Medical Licensure, and Commissioner for Health Services, it was reported that KMA Physicians Services, Inc. had sold 80% of the stock in the KMA Insurance Agency, Inc. to the Kentucky Medical Insurance Company.

It was reported that 23 meetings had been held by officers and/or staff on professional liability insurance activities, and a PLI conference on "Competitive Interdependence" would be held March 11-12, 1987, in Lexington.

The Board noted that the names of KMA members willing to serve on Peerview Committees had been forwarded to the PRO, and that Bob M. DeWeese, MD, Louisville, had been named to an advisory committee of the Peerview Board.

The Board members reviewed information on every licensed HMO and PPO operating in Kentucky which had been gathered in response to Resolution J (1986), and asked that the data be sent to the membership. In other action, the Board adopted the recommendation of the Committee on Medical Insurance and Prepayment Plans to increase rates 5% on the KMA-endorsed BCBS health insurance plan for KMA members, with exclusion of "Assurance Plus."

In addition, the Board endorsed a brochure drafted by the Committee on School Health, Physical Education, and Medical Aspects of Sports outlining the dangers of drugs to high school athletes, and determined that the Auxiliary and McDowell House Board of Managers would plan and host the 1987 McDowell/Crawford Ball and split any profits. It was noted that final registration at the 1986 Annual Meeting was 1,955 with 989 members and 170 guest physicians. The Board members heard a report on governmental matters to include Medicare, Medicaid, and hearings on physician assistants and physical therapists.

The next Board meeting was scheduled for April 15-16, 1987.

### **Third Meeting April 15-16, 1987**

Board members attending the April KMA Board of Trustees meeting heard Officers reports, approved the 1987-88 Budget, made committee appointments, and endorsed appointments of Ad Hoc Committees on Indigent Care and the Development of AIDS Guidelines.

John S. Llewellyn, MD, Secretary for the Board of Medical Licensure, reported that the BML's inquiry panels meet monthly to review investigative reports and determine if action against a physician's license is warranted.

Doctor Llewellyn also reported that the Board of Medical Licensure had appointed a committee to study the issue of hospital/physician relationships, which will consider adopting guidelines to assist physicians when entering into agreements with hospitals. William B. Monnig, MD, Edgewood, has been named as KMA's representative to that committee.

Nelson B. Rue, MD, Board Chairman, reported that he had given testimony on AIDS at a meeting of the Committee on Health and Welfare of the Kentucky General Assembly, and it seemed appropriate for KMA to develop policy guidelines relating to AIDS. Doctor Rue stated that an ad hoc committee had been appointed with Ardis D. Hoven, MD, Lexington, serving as Chairman.

The Board adopted a proposal developed by the KMA Committee to Investigate Changing Trends in Medicine that outlined suggestions for educating patients about various aspects of alternate delivery systems and for providing advice to physicians preparing to sign contracts to deliver care through prepaid systems. A possible joint venture with the Jefferson County Medical Society will be considered after more information has been collected.

Wally O. Montgomery, MD, Chairman of the Ad Hoc Committee on Professional Liability Insurance, reported that KMA's public relations firm, Wenz-Neely, is preparing packets for distribution to legislators. He noted that the Committee is considering legislative proposals to augment KMA's package for legislative reform recommended by the House of Delegates in 1986. The proposals include those offered by the Tort Reform Association of Kentucky and provisions adopted by other states regarding expert witness identification.

The next meeting of the Board of Trustees was scheduled for August 5 and 6, 1987.

### **Fourth Meeting, August 5-6, 1987**

The fourth regular session of the Board of Trustees was held on August 5-6, 1987. Reports were presented by the

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President, Auxiliary President, Vice President (Headquarters Office Report), and the Senior Delegate to the AMA who highlighted actions of the June AMA Annual Meeting. The Board of Medical Licensure President summarized activities of that Board for the past year, and the new Peerview Medical Director made his first presentation to the KMA Board members. The Commissioner for Health Services discussed indigent medical care in Kentucky, and an annual report of KMA Physician Services, Inc. was presented.

The Board voted approval of the use of funds from the Legal Trust Fund and authorized \$10 voluntary billing of Regular, Active members for the Fund next year. Reports were accepted regarding a number of KMA committees with details on specific activities highlighted by the Membership and State Legislative Committees. A full update was presented by the Chairman of the Ad Hoc Committee on Professional Liability Insurance on the PLI Campaign, and an Executive Committee recommendation to delete four committees was approved.

Nominations were made to the Governor for physician appointments to the Council on Health Services and the Hemophilia Advisory Committee. Two-year appointments were made for the KMA *Journal* editorial staff and authorization was given to revise the *Journal* format. Bylaws for the Hospital Medical Staff Section were changed to allow for three-year rather than one-year terms.

A number of Annual Meeting matters were discussed and it was agreed to submit Board Resolutions to the House of Delegates on the subjects of Medicare and peer review organizations. A listing of actions taken by the 1986 House of Delegates was distributed for review of the implementation of each action, noting the same information would be sent to every Delegate as a part of the Board Chairman's Report.

Donald J. Swikert, MD, presented a report on his role as a KMA representative to the AMA Young Physicians Section. The Board is continuing to search for additional ways to serve young physicians and to involve them in KMA. Doctor Swikert's written report (available in the Headquarters Office) contained a number of recommendations in this direction, all of which were approved by the Board.

Considerable time was consumed to finalize the Board's six ad hoc committee reports, and a thorough review was made of the reports of all KMA committees so Board action could be recommended to the House of Delegates.

The next meeting of the Board was scheduled for September 13, 1987.

### Executive Committee

Between meetings of the full Board, eight physicians gather on a routine basis to oversee the conduct of the day-

to-day Association business. The time they give would be shocking to many. Their effort is exceptional. They are your main Officers and Trustees elected by the Board. They truly deserve an acknowledgement of your appreciation. Four of this group serve as your Quick Action Committee. They make decisions of an urgent nature and during the Kentucky General Assembly, meet on an almost weekly basis in Frankfort to direct our legislative program. These individuals are the President, President-Elect, Chairman of the Board, and Secretary-Treasurer. Busy days are ahead for them in the immediate future. Think about the commitment they accept and what they give for organized medicine.

### Ad Hoc Committees

This year we had six important ad hoc committees serving the Board. The six are the Ad Hoc Committees on: (1) Professional Liability Insurance; (2) Indigent Medical Care; (3) Development of AIDS Guidelines; (4) Foreign Medical Graduates (FMGs); (5) Kentucky Medical Insurance Company (KMIC); and (6) McDowell House.

The special Ad Hoc Committee on the McDowell House has had several meetings to discuss what would be a substantial gift to the McDowell House. It is expected that a McDowell House Foundation will soon be set up and, when details are worked out, the gift is expected to be presented to the Foundation. The membership will be informed as soon as this becomes a reality.

The Ad Hoc Committee on Foreign Medical Graduates was convened to consider FMG representation on the Board of Medical Licensure, licensure requirements for FMGs, and related issues. The Committee determined that singular representative positions on the Licensure Board were not appropriate, but that BML Board members should advocate all physician and public concerns. At a future meeting the Committee will address licensure requirements and other matters.

The Ad Hoc Committee on KMIC was appointed at the request of the Jefferson County Medical Society to review the KMIC Board structure and policies. The Committee's findings were consistent with KMIC policy, and recommendations included discounting premiums for those practicing less than full time, diminishing practice, and teaching; more publicity to show the liability crisis is *not* an insurance crisis; and urging the KMIC President to continue his crusade for no-fault legislation. These recommendations are being transmitted to KMIC.

Three ad hoc committees are submitting their reports in considerable detail and are appended to the end of this Report. They are the Reports of the Ad Hoc Committees



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on Professional Liability Insurance, Indigent Medical Care, and Development of AIDS Guidelines.

I also want to report that Resolution I, adopted by the 1986 House of Delegates, called for a review of KMA's committee structure. This was accomplished by the Board, and four standing committees were deleted.

Resolution AA, also adopted by the 1986 House of Delegates, called for a summary of implementation efforts (status report) taken during the year on the previous year's House of Delegates actions. This implementation report is the final item appended to my report.

Thanks, again, to each member of the KMA staff and all of my colleagues for outstanding assistance and support and for the privilege of serving as your Chairman. It was a learning experience . . . but definitely a privilege.

**Nelson B. Rue, MD**  
**Chairman**

### Report of the Secretary-Treasurer

I am pleased to report to you another vigorous and productive year of your Association, and am privileged to be part of these activities.

Your attention is directed to the Auditor's Report, which contains the details of KMA's fiscal status. A \$100-a-year dues increase has established a strong financial base for the Association, although the increase is earmarked for professional liability insurance (PLI) activities. Even though the dues increase was significant, the membership has remained constant.

The structure and physical facilities of KMA are well-maintained, and it is particularly interesting to note that the mortgage debt on the first building addition has been retired. The KMA Headquarters is an attractive building, and all members are invited to visit it at their convenience.

A great deal of time, effort, and resources have been expended this year by Board members, Officers, and staff on the PLI program. These efforts are addressed in more detail in the Report of the Ad Hoc Committee on Professional Liability Insurance, but it is important to recognize that these efforts were and are being carried on in addition to all of the other regular work and activities that must take place each year to support our professional concerns.

The Association is only as strong as its membership. While KMA has initiated and moved ahead vigorously with the PLI program as well as in other significant areas, such as developing AIDS guidelines and an indigent care proposal, ultimate success depends on the endeavors of individual members. The organization belongs to the individual member and input from everyone is urged, as are every-

one's individual efforts. While the profession continues to be confronted by problems that were unimagined a few short years ago, it remains active and effective, and its accomplishments have not diminished.

I remain awed by the tireless work of the Officers, Board of Trustees, and all KMA committees toward the goals of KMA, and I humbly appreciate the confidence you have placed in me by allowing me to serve.

**S. Randolph Scheen, MD**  
**Secretary-Treasurer**

### Report of the Editor

During the past year, I represented our Editorial Board at the SMJAB conference in Austin, Texas. The two-day event consisted of workshops, lectures, and a critique of our *Journal*. Much of the information presented is being incorporated into the format of the *Journal*. Steps are being taken to enlist the help of a graphic artist to incorporate design changes in the *Journal*. Many of the changes in the cover and layout will be subtle yet innovative enough to make the *Journal* more visually attractive.

As in the past, the main focus of the *Journal* is to provide the best scientific and clinical articles and to give membership concise information on Association activities. I believe we are accomplishing this goal and apparently KMA members believe so too. In a recent Survey on Readership conducted by Health Industries Research, one of the questions Kentucky physicians were asked was, "Of every four issues of the *Journal of KMA*, how many do you read or look through?" Sixty-two percent indicated they read four issues out of four. The comments received in the survey were encouraging also. They included: "Good forum for exchange of information. Highlights scientific articles of members"; "Very good OB/GYN articles. Kept several for reference and have shown to patients."

While I'm very proud of the quality of the *Journal*, I cannot emphasize enough that the high caliber is due to the Kentucky physicians who take the time to write about their clinical experiences. The *Journal* is their vehicle for sharing information and we urge members to continue submitting these fine articles.

Other sections of the *Journal* including the Grand Rounds section and a new feature, "Clinical Notes on Aging," require hours of preparation, and the Board deeply appreciates the efforts from the medical schools and KMA Committees responsible for them.

The Board of Editors welcomes D. Sue Tharp as the new Managing Editor. She has assisted with the *Journal* for the past three years and is replacing Donna M. Young who will be accepting new responsibilities at KMA.

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I would like to thank the members of the Editorial Board for their time, effort and devotion. Their desire to provide the membership with the best possible publication is evident as one reads the *Journal*.

**A. Evan Overstreet, MD**  
Editor

### Report of the Delegates to AMA

The AMA House of Delegates continues to increase in size, having seated 406 Delegates (this does not count Alternate Delegates) at its recent Annual Meeting. Of those Delegates, 327 represent state medical associations, 69 represent national medical specialty societies, and 10 represent section and service Delegates (including medical students, medical schools, resident physicians, hospital medical staffs, young physicians, Army, Navy, Air Force, U.S. Public Health Service, and the Veterans Administration).

Additionally, issues which the AMA House considers continue to increase in both number and complexity. At the 1987 Annual Meeting, the House considered, debated, and acted upon 196 Resolutions and 81 reports. Thus it becomes apparent that this report can summarize only a few of those issues. If anyone should desire additional information on these topics or any other issue considered by the AMA House, please feel free to contact the undersigned or any other member of our AMA Delegation.

There has been a change in the makeup of our AMA Delegation. Doctor Harold Haller retired from our Delegation, and Doctor Kenneth Crawford, who had previously served as Alternate Delegate, was elected Delegate. Doctor Robert Goodin was elected Alternate Delegate. Harold will be missed, and he leaves big shoes to be filled. We are pleased to have Doctor Goodin as a member of our Delegation, and he has already demonstrated quite well that he will be an asset to our Delegation. We have a very capable and strong Delegation, and it is a pleasure to have an opportunity to work with them.

### Dues

We are advised there will not be a dues increase in 1988, but we are relatively certain there will be an increase for 1989; the only question is how much. It will probably range somewhere between 20 and 40 dollars.

### AIDS

The House conducted a rather lengthy debate relative to this sensitive, controversial, and important issue. We re-

ceive more national media coverage on this one issue than perhaps all other issues combined in recent times. There were numerous Resolutions, as well as a report from the Board of Trustees, relative to the AIDS issue. Highlights of the policies adopted by the House are as follows. The AMA should:

1. Institute an AIDS public awareness and information program;
2. Endorse the education of elementary and young adult students within the school system regarding the mode of transmission and prevention of transmission of the human immunodeficiency virus (HIV);
3. Address, through the Council on Ethical and Judicial Affairs, the patient confidentiality and ethical issues raised by the presence of known HIV antibody-positive patients who have refused to inform their sexual partners or modify their behavior;
4. Work with various state societies in seeking to delete legal requirements for a consent to medically indicated HIV testing, which are more extensive than requirements generally imposed for informed consent to medical care;
5. Assist states in their efforts to take whatever actions are necessary to allow blood banks and health departments to share information for the purpose of locating and informing persons who have any transmissible, blood-borne disease;
6. Seek greater involvement and adequate funding from state and national levels for immediate development and implementation of AIDS/HIV educational programs;
7. Work with concerned groups to establish appropriate and uniform policies for neonates, school children, and pregnant adolescents with AIDS and AIDS-related conditions;
8. Lobby for federal, state, and local governments to allocate funds for AIDS education programs in schools, colleges, and news media;
9. Expand its work on AIDS with public service announcements to include messages on abstinence, condom usage, and safer sex for distribution to media that specifically targets high-risk groups;
10. Identify risk factors and guidelines for hospitals, medical staffs, and health workers appropriate to the care of AIDS and HIV-positive patients;
11. Include in such guidelines policy that would enable physicians caring for patients with a positive HIV test to discuss with legal immunity and in a confidential manner these patients with other health care professionals who are also involved in their care, and assist state medical societies in changing state



laws where such informational exchange is now prohibited;

12. Distribute these guidelines widely and encourage medical staff and health workers to work closely with their hospital administrations and governing bodies in establishing appropriate hospital policies regarding AIDS and HIV-positive patients;
13. Affirm support for the dignity and self-respect of all patients;
14. Oppose all acts of medically unfounded discrimination against patients because of their medical condition;
15. Join with the Surgeon General, and with the public health community, in endorsing the use of condoms as one useful measure in attempting to contain the spread of the HIV virus among the population; and
16. Investigate the possibility of cooperation in setting up a foundation or coalition with the public health community and/or government agencies for the purpose of developing standards and producing tasteful public service announcements regarding condom use, in an attempt to limit AIDS and other sexually transmitted diseases.

### Physician DRGS

The House expressed strong opposition to the proposal of the Administration to include physicians under the DRG reimbursement mechanism. The excellent work of the AMA Washington Office, as well as state medical associations and others, hopefully will assure defeat of this proposal. While the initial proposal may be to include only radiologists, anesthesiologists, and pathologists, we all know that eventually the entire physician population would be included.

### MAAC Regulations

The AMA House of Delegates has directed AMA leadership to:

1. Continue to seek legislative and regulatory changes that will eliminate the maximum actual allowable charge (MAAC) regulations for participating physicians;
2. Seek to assure, in the meantime, that all Medicare fiscal intermediaries send to nonparticipating physicians adequate information for calculating MAAC levels; and
3. Support any individual component society's legal efforts to prevent passage or to overturn any state law that restricts the right of physicians to contract for services rendered to their patients and, under certain conditions, what fees will be charged.

### Professional Liability

As usual, there were several Resolutions, as well as Board of Trustees Report AAA, dealing with professional liability. Needless to say, this is a very important, complicated issue to resolve. The general conclusion of the AMA House was that while tort reform measures should continue to be pursued vigorously in the states, there also is an urgent need for development of effective alternative measures. It is the understanding that the AMA Board of Trustees, the Special Task Force on Professional Liability, the Advisory Panel on Professional Liability, and the AMA Council on Legislation will continue their efforts in finding solutions to this dilemma.

### PRO

Perhaps all of you are already aware of the recently achieved agreements among the AMA, Health Care Financing Administration (HCFA), Office of the Inspector General, and American Association of Retired Persons concerning new procedures that assure greater due process protections for physicians. Since those agreements have been widely disseminated, I will not include them in this report. Other actions which the House took on professional review organizations (PROs), in addition to the above-mentioned accomplishments, are:

1. Adopting a Resolution calling upon the AMA to seek an amendment to the Medicare law to eliminate the notice of Medicare denial-of-payment decisions based on adverse quality-of-care findings until after all review and appellate avenues are exhausted;
2. Ask AMA to continue to monitor the activities of PROs and encourage physicians to report their concerns; and
3. Ask the AMA to seek amendments to the PRO law which would require that:
  - a. The definition of "gross and flagrant" be revised and modified to include only those violations which cause the PRO to conclude that the continuation of medical practice by the physician would constitute immediate danger to the health, safety, or well-being of Medicare beneficiaries, and
  - b. If an "immediate hazard" to the health and welfare of Medicare beneficiaries exists, a special expediting hearing process should be statutorily created for immediate action prior to, if possible, or immediately after a sanction decision.

The House also recommended that in cases involving a PRO denial, a physician of the same specialty should review a case before a formal denial letter is sent. Prior to the initiation of a sanction action or corrective action plan,

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either a subspecialist peer, or a specialist who has appropriate expertise and experience in the field, should review the case. The House also recommended that the AMA seek changes which would provide that:

1. Prior to recommending sanctions to the Office of the Inspector General, the PRO contracting with HCFA must provide for review by an impartial panel of physicians practicing in a setting similar to that of the reviewed physician;
2. The standard of level of care upon which the physician is judged be established by expert witnesses, recognized textbooks and journal articles, and other credible evidence, not by panel members, but presented by another individual to the panel in the presence of the reviewed physician.
3. Opportunity be accorded to the reviewed physician to see and hear all evidence presented to the impartial panel and respond to it with witnesses and other credible evidence;
4. The impartial physician panel should render its decision based solely on the evidence produced at the hearing; and
5. The PRO formulate recommendations to the Office of the Inspector General, based solely on the evidence presented by the impartial physician panel, and subsequent briefs or materials developed by the PRO on the case or cases subject to review, these to be provided to the physician being reviewed for comment.

### Tobacco

While the Kentucky Delegation does not support the *intensity* of the anti-tobacco movement in the AMA House, we are nonetheless a *conspicuous* minority. The AMA House took the following actions at the recent Annual Meeting:

1. Recommend that the Federal Aviation Administration establish regulations to ban smoking on all commercial aircraft;
2. Develop model legislation to improve enforcement of laws restricting children's access to tobacco, including a proposal to establish a license for the sale of tobacco, similar to that for liquor, that can be revoked for conviction for sales to minors;
3. Encourage the passage of laws, ordinances, and regulations that would set the minimum age for purchasing tobacco products at 21;
4. Study the dangers of clove cigarettes;
5. Intensify efforts to educate the public about the hazards of using all tobacco products;
6. Urge physicians to provide "quit smoking" messages to all their patients who smoke as part of routine medical care;

7. Encourage physicians to participate in continuing medical education activities designed to help them assist their patients to quit smoking; and
8. Gather information regarding the progress that is being made on the national, state, and local levels toward achieving a "tobacco-free society by the year 2000," and give progress reports to the House at each Annual Meeting until the year 2000.

### Dispensing by Physicians

The issue of physicians dispensing drugs received much attention, and after considerable discussion, the House voted to support the physician's right to dispense drugs and devices when it is in the best interest of the patient and consistent with AMA's ethical guidelines.

### FMGS

The House did not approve the establishment of a new section for foreign medical graduates (FMGs) as recommended by the AMA Board of Trustees. Some of the reasons the House rejected this recommendation included the feeling that FMGs should be "mainstreamed" into organized medicine, and there was further feeling that the creation of a section might increase, rather than decrease, "conflicts." Further, the House felt there was no evidence that the creation of such a section would result in AMA membership growth, as some had claimed. Lastly, and perhaps most importantly, the House felt that most of the issues of interest to FMGs were concerns shared by all physicians.

### Health Policy Agenda

Culminating five years of effort involving over 425 people from 172 different health and health-related organizations, the AMA House of Delegates considered 195 recommendations of the Health Policy Agenda for the American People. Those recommendations are too lengthy to be listed here; however, a report of the official action of the AMA House can be obtained from AMA.

### Scientific Publications

The AMA Council on Scientific Affairs issues various scientific publications from time to time, and has recently issued a few which are worthy of particular attention. One is a monograph on AIDS and the others deal with the issue of drugs and drug testing in the workplace. Report J of I-86, "Scientific Issues and Drug Testing," and Report A of A-87, "Issues in Employee Drug Testing," are two very thorough, precise, and well-written reports. The latter report deals primarily with the legal and constitutional issues



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of drug testing in the workplace. I would recommend all of the above publications to every physician, but especially the latter two for those physicians who do occupational medicine either full-time or part-time.

### AMA Elections

Attached is a list of those elected at the Annual Meeting and their respective positions. Elected without opposition were all four incumbent AMA Trustees.

The next meeting will be the AMA Interim Meeting in December 1987 in Atlanta, Georgia.

On behalf of our AMA Delegation, I wish to express appreciation to every member of the KMA House of Delegates for the opportunity to serve in this capacity, and especially for the input and suggestions we receive. To know your feelings and opinions makes our job of representing you in the AMA House of Delegates much easier.

**Fred C. Rainey, MD**  
Senior Delegate to the AMA

### AMA Elections

President	William J. Hotchkiss, MD Virginia
President-Elect	James E. Davis, MD North Carolina
Speaker of the House	James L. Clowe, MD New York
Vice Speaker	Daniel H. Johnson, Jr, MD Louisiana
Trustee	John H. Dawson, MD Washington
Trustee	Ray W. Gifford, MD Ohio
Trustee	Robert E. McAfee, MD Maine
Trustee	Joseph T. Painter, MD Texas
Resident Trustee	Timothy Baldwin, MD
Student Trustee	Stefano M. Bertozzi
Chairman, Board of Trustees	Alan R. Nelson, MD Utah
Vice Chairman of the Board	John J. Ring, MD Illinois
Secretary-Treasurer	George L. Collins, MD New York

Also, serving on the Executive Committee of the Board are Doctor Painter and Jerald R. Schenken, MD, Nebraska.

### Report of the Executive Vice President

The KMA Headquarters staff generated an unparalleled level of activity during this past Associational year as KMA's mission continues to expand. Leadership and staff are committed to provide members with all the services they expect from their professional association and to achieve those goals set by the membership.

Following the 1986 House of Delegates Meeting, KMA Officers and staff began plans to implement directives adopted by the House. We met for two full days, primarily focusing our attention on the Professional Liability Insurance (PLI) Campaign, as directed by the House of Delegates. After our initial meetings with Officers, other meetings were held with the Chairman of the Committee on State Legislative Activities to begin the development of final plans for the campaign. This report will not dwell on these activities, since they receive comprehensive attention in the Ad Hoc Committee Report. However, let me assure you that it has received the attention it deserves, and *every* member of the KMA staff has been involved and is totally committed to its successful conclusion. We are also cognizant that the complex problem of liability insurance has no simple solutions.

A crucial element in the KMA PLI Campaign was to pool our resources with other associations and businesses that were committed to tort reform. This resulted in a special undertaking by KMA, which was largely responsible for the formation of Tort Reform Association of Kentucky (TRAK). In addition to funds, KMA provided executive and administrative staff to help get TRAK organized and operating. We hope to see results from TRAK during the Kentucky General Assembly.

As time for the Kentucky General Assembly approaches, we are preparing for many other legislative proposals that will have major implications for medicine. The Committee on State Legislative Activities will report on these. This Associational year has seen us not only closely monitoring the Interim Committee System but giving a considerable amount of testimony on such subjects as indigent medical care, AIDS, and the desire of nonphysician practitioners to expand their scope of practice. We anticipate some 1,500 bills to be introduced in the three-month 1988 Legislative Session with 10% of them directly related to health or medical care. KMA will again maintain a Frankfort Office and we expect to have at least three full-time lobbyists working on behalf of the Association during the Session.

During the year we held periodic meetings with various government officials including the Commissioner of Insurance, the Secretary to the Cabinet for Human Resources

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(CHR), and the Commissioner for Health Services. The CHR, in response to KMA's concern, has dramatically increased Medicaid funding for obstetrics. While we are pleased with this action, state government leaders must begin to understand that they can no longer meet budgetary shortfalls by arbitrarily reducing provider payments. KMA, through the Kentucky Physicians Care Program with over one-half of our members participating, has demonstrated its concern and compassion for the aged and the poor. Legislators and those empowered to enact our laws and regulations need to begin demonstrating their concern rather than continuing the rhetoric that traditionally flows from Frankfort and Washington.

On the national front, changes in Medicare reimbursement, restrictive regulations, and sanctioning threats highlight the Washington scene. We concluded a highly successful visitation and dinner with our Washington legislators this year and are pleased with the results. Seven out of nine members of the Kentucky Delegation signed the AMA-sponsored Resolution in opposition to physician DRGs. We value our relationship with the Kentucky Delegation and will continue to strengthen this important link in government relations.

Thirty-six committees continue to serve the membership and conduct a range of activities and programs too numerous to list. Please read their reports, which provide a "taste" of their efforts and accomplishments.

## Medical Practice Activities

As the physician population grows, and the general population stabilizes, the Association is placing greater emphasis upon programs that augment patient flow and increase productivity of physicians and staff. During the year we conducted eight seminars and workshops in the areas of contracting, reimbursement, coding, starting your practice, and other practice management issues. More are planned for next year. KMA is now offering a booklet designed by the Pennsylvania Medical Association which explains what physicians should know about contracting with HMOs, PPOs, IPAs, as well as with traditional health insurers. In cooperation with the Jefferson County Medical Society, we have developed a patient brochure which provides the patient with background on the various alternate delivery systems and poses questions that should be answered before the final choice is made. A contract review and negotiation service is now available to the membership through KMA's General Counsel, Stites and Harbison.

The Hospital Medical Staff Section (HMSS) continues to be an excellent addition to the KMA family and provides a vital link to the core of many of our members' primary

concerns, the hospital. The KMA HMSS, while still in the infant stage, is building a solid foundation as it prepares for an important role in the future of medicine.

## Representation

Representation is the key word that best describes KMA's day-to-day role in serving its members. KMA provides that representation to government agencies, the Legislature and Congress, allied groups, business, and across the board to the public-at-large.

This year we had ongoing meetings with Blue Cross and Blue Shield concerning Resolutions adopted by the House of Delegates last year as well as additional items of business. Communication is similarly conducted with other private and governmental third-party payors. Periodic meetings are held by the Allied Health Council, composed of representatives from the Kentucky Hospital Association, Kentucky Dental Association, and the Kentucky Pharmacists Association. Today's medical climate necessitates closer relations between physicians and hospitals, so there are frequent meetings held between KMA and KHA. Representing Kentucky physicians is what KMA is all about.

## Membership

The Membership Committee continues to increase our membership base through its recruitment and retention activities. A KMA staff member works full time on membership and attends AMA and various other meetings to learn new ways to bring more nonmembers into KMA. While we struggle with recruitment, we are pleased that overall membership continues to grow. Active full-dues-paying membership increased approximately 2% with overall membership rising nearly 5% this past year.

We are continuing to put special membership effort into the areas of students, residents, hospital medical staffs, and foreign medical graduates. Kentucky's two medical schools have been very cooperative with KMA and offer Officers and staff the opportunity to address students and residents on the value of an organized profession. Our Student and Resident Sections are becoming quite active and we fully expect to see the fruits of these labors in the coming years.

KMA has been and will always be the voluntary mechanism by which Kentucky physicians can have a say in this profession . . . and thus their future. We urge each member to be an active extension of the Membership Committee.

## Finances

KMA's financial position remains strong, and concerted efforts are made daily to be as cost effective as possible.



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The sale of 80% of the KMA Insurance Agency to KMIC this year provided some additional operating funds and the opportunity to place \$200,000 in the Reserve Fund. A strong Reserve Fund provides considerable income which would otherwise have to be replaced with significantly increased dues. The \$100 dues increase for the PLI Campaign was voted last year on a two-year basis and will run through 1988. It has made it possible for us to do things we could not have otherwise done in KMA's effort to address the cost and availability of professional liability insurance. The House will consider dues for 1989 at next year's meeting.

### Staff

Although the workload continually increases, the staff continues to perform in a superb manner. Two of our staff members, Lillie R. Byrd, Director of Financial Operations, and Doris Crume, Secretary to the Legislative Department, reached their 20th anniversaries as KMA employees this year. One-half of our staff are 10-year veterans of KMA and that experience is irreplaceable and most notable.

On July 1, executive staff member William E. Doll, Jr., returned to the full-time practice of law. After serving four years as a retained lobbyist, Bill joined our staff full time as Director of State Legislative Activities in 1981. He will continue to work with us on a retained basis in his new capacity and we wish him well.

On June 1, Donna M. Young was elevated to the executive staff from her previous position as Managing Editor of the *KMA Journal*, where she had served KMA for the past eight years. We welcome Donna in her new role where she will have expanded duties, staff numerous committees, and still oversee the *Journal* operation.

I am grateful to be associated with such an outstanding group as the KMA staff and thank them for their untiring efforts.

### Conclusion

In concluding my report, let me say a special thanks to the Board and Officers of KMA. They have all "dug in" this year and demonstrated serious dedication to their tasks. It has been a pleasure for those of us on staff to work for them. As President-Elect, Doctor Barton has fully prepared himself for next year and Secretary-Treasurer Scheen has again given of his time so liberally that I am sure he must donate a minimum of one day a week to KMA.

President Hench deserves special praise, for he has not only performed his duties in exemplary fashion and been always available to staff, but has also given a day or two a month as our representative on the Liability Task Force.

His dedication, his effort, and his contributions will long be remembered.

Your Board Chairman, Doctor Rue, was the first person ever elected Board Chairman for three terms. In addition to his Board duties, he has been readily available to represent KMA, to speak to groups, and to testify in Frankfort on short notice.

We congratulate the University of Louisville School of Medicine on its 150th anniversary. The University of Louisville has been consistent in its support to organized medicine and has made a magnificent contribution to every Kentuckian through its educational excellence and emphasis on quality medical care.

Thanks, also, to the House of Delegates and all KMA members for their continuing support and cooperation with KMA Officers and staff. We look forward to another year of progress and service to Kentucky physicians.

**Robert G. Cox**  
Executive Vice President

### Report of the Advisory Committee to AKMA

The AKMA Advisory Committee was organized several years ago to assist the Auxiliary in its programs and coordinate AKMA/KMA activities. The Advisory Committee membership was composed of the KMA Immediate Past President, President, and President-Elect. According to records, the Committee has met on only one occasion. Several years ago, the KMA Board of Trustees began inviting the President of AKMA to the KMA Board Meetings. The agenda included a presentation from the President of the Auxiliary so that reports could be made and requests presented. As a result, the Board, in most cases, deals directly with the Auxiliary.

Therefore, we have recommended to the KMA Board of Trustees that the Advisory Committee to the Auxiliary be abolished. In the event a committee is needed the Board can appoint a committee on an ad hoc basis. With a direct link to the Board of Trustees and the continuation of an Executive Staff member assigned to work with the AKMA President, we believe the program will be enhanced and an unnecessary committee can be abolished.

**Wally O. Montgomery, MD**  
Chairman

### Report of KMA Physician Services, Inc.

KMA Physician Services, Inc. is a wholly-owned subsidiary of the Kentucky Medical Association. It serves as

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a holding company, and the members of the KMA Executive Committee comprise its Board of Directors.

During this past year, 80% of the KMA Insurance Agency was sold to the Kentucky Medical Insurance Company, with KMA Physician Services, Inc. retaining 20% ownership. Proceeds from this sale were used to bolster the KMA Reserve Fund, help with operating expenses, and maintain a contingency fund in the KMA Building Corporation.

In the transfer of ownership, the corporate shell of the original KMA Insurance Agency became the KMA Building Corporation. Its purpose is to collect rental funds and pay expenses for the newest addition to the KMA Headquarters building. The Building Corporation is now the only wholly-owned subsidiary of KMA Physician Services, Inc., which in turn is the only wholly-owned subsidiary of KMA.

We are pleased with this year's transactions and feel they should be most beneficial to KMA in the years to come.

**Nelson B. Rue, MD**  
**Chairman**

### **Report of the Kentucky Medical Insurance Company**

The Kentucky Medical Insurance Company (KMIC) completed its eighth year of operation on June 1, 1987, with approximately 2,300 policyholders representing more than 50% of Kentucky's physician liability insurance market. With over \$32 million in assets as of June 30, 1987, KMIC's premiums written in 1987 are projected to total approximately \$24 million.

During 1986 and 1987 KMIC became a parent company for two subsidiaries: the KMIC Investment Company in 1986 and the KMA Insurance Agency, Inc. (Agency) in 1987. The KMIC Investment Company was formed by the KMIC Board of Directors and incorporated in December 1986; however, it did not operate until 1987.

Formation of the investment company gave KMIC the opportunity to expand its services and products for Kentucky physicians. The initial focus of the investment company was to sponsor the KMIC Retirement Trust, a professionally managed retirement trust fund, for individual physicians and groups having qualified pension monies to invest.

KMIC completed acquisition of its other subsidiary, the KMA Insurance Agency, effective April 1, 1987. KMIC became majority-owned by purchasing 80% of the Agency's stock. KMA Physicians Services, Inc., a holding company of the Kentucky Medical Association, owns 20% of the Agency.

The Agency's operations in 1987 were highlighted by the following developments:

- Promotion of Thomas M. Elder, CLU, ChFC, to the new position of Agency Manager. Mr. Elder was formerly Life and Health Manager for the Agency.
- New benefit for KMA members: group dental insurance through Delta Dental of Kentucky.
- Addition of Aetna Life and Casualty products to the Agency's personal lines.
- Seminars on tail coverage funding and retirement assets management as a service to Agency and KMIC policyholders.

In February, KMIC announced to policyholders: (1) the implementation of an overall average rate increase of 46% effective April 1, 1987; (2) increased severity of closed claims for the prior year; (3) a premium discount for policyholders who participate in KMIC's Claims Prevention Seminars; and (4) a reduction in tail coverage costs.

The Company's Claims Prevention Department conducted 21 seminars in eight Kentucky cities this year. Over 1,400 physicians attended the KMIC seminars which dealt with methods to avoid medical misadventures and malpractice litigation.

Although KMIC reported a loss of \$112,451 for the first quarter of 1987, the second quarter followed with a gain of \$133,233 net income and an anticipated return to profitability for the remainder of the year.

The Annual Meeting of Stockholders of KMIC was held on April 30, 1987. KMIC shareholders elected all 12 Directors who were nominated. The new Director among them was Danny M. Clark, MD, a Somerset, Kentucky obstetrician/gynecologist. Doctor Clark was appointed to fill the unexpired term of James A. Baumgarten, MD, in November 1986. Doctor Baumgarten resigned from the Board when he joined KMIC's corporate staff as Director, Claims Prevention and Awareness, in August 1986.

At the Annual Meeting, shareholders also approved an increase in the number of authorized shares of the Company's Class A common shares and Class B common shares. This increase was authorized in order to facilitate a two-for-one stock split of all outstanding Class A and Class B shares. (The split was declared by the Board of Directors at its December 18, 1986 meeting.) The stock split was effected in the form of a 100% stock dividend paid on May 22 to all shareholders of record as of May 11, 1987.

Immediately following the Annual Meeting, two new company officers were elected at the Board of Directors meeting. The new officers were Laurel Brown, Vice President, Human Resources, and David W. Lester, Vice President and Chief Financial Officer.

Many KMIC policyholders and other physicians met with KMIC management staff in a series of informal "Physicians' Forums" held in ten Kentucky cities during March



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and April. The purpose of these meetings was to provide Kentucky physicians with information about rate determination and loss development of claims against our policyholders. The forums were also designed to give physicians an opportunity to voice their concerns and thoughts about the medical malpractice insurance crisis. Physicians responded favorably to the forums and many expressed a desire for more face-to-face contact with our staff.

Despite the negative impact of increased claims on professional liability premiums, KMIC continues to provide available, sound coverage while committing itself to dealing directly with reducing claims and their costs. The Company also strives to hold down the costs and losses associated with medical malpractice through its claims awareness program and statewide program to monitor and reduce legal defense costs without jeopardizing the quality of defense.

KMIC and its subsidiaries pledge to maintain a tradition of financial strength, quality products, and excellent service for Kentucky physicians. In the future, KMIC will continue to strive to merit the confidence of Kentucky physicians who have supported KMIC since the company's formation.

**Ballard W. Cassady, MD**  
Chairman

### END OF CONSENT CALENDAR ITEMS

#### Report of the President

Trying to summarize the past year is very difficult in view of the myriad problems and activities involved. Your Officers and Board of Trustees have tried diligently to carry out the directives and follow the philosophy of the House of Delegates. This is reflected by the numerous reports submitted to you for this meeting.

There are several areas I would like to review:

#### Medical Liability

The campaign developed and financed by the House last year is moving toward the 1988 Kentucky Legislature. Your Officers, Board members, and Ad Hoc Committee on Professional Liability Insurance, and staff have spent a great deal of time and effort on this program. Throughout this KMA Annual Meeting, you will be seeing and hearing details of this operation. The foundation is in place for an effective and successful drive. The results will depend on the commitment and dedication of the individual physicians of Kentucky.

#### Indigent Care

This problem must rank very high both because of its severity and the fact that there are many forces at work in

medicine today which can only make it worse. The Board of Trustees appointed an ad hoc committee to study indigent medical care. The Committee members submitted a detailed report with specific recommendations, which has been approved by the Board and merits your detailed consideration. It is a difficult problem and no solution is likely to please all of us, but a solution is essential.

I cannot leave the area of indigent care without thanking Doctor Russell Travis for his long, hard, and very effective efforts on behalf of KMA and the medically poor of Kentucky.

#### Third-Party Interference

The frustrating and destructive obstacles erected by third parties in the name of economy and quality of care continue. KMA's relationship with Peerview is still evolving and is closely monitored by the Board of Trustees. We need to do all that is in our power to see that Kentucky physicians and patients are treated fairly and equitably by any review organization, thus the Board of Trustees' recommendation for an oversight committee.

#### Membership

Today's economic and competitive climate makes membership in organized medicine more vital, and yet harder to maintain. Our Membership Committee and staff have labored hard and successfully to increase our membership this year. However, we still need to increase the membership, especially among younger doctors, women physicians, and foreign medical graduates in order to be fully representative. The Board of Trustees has appointed an Ad Hoc Committee on Foreign Medical Graduates, and its work is mentioned in the Report of the Chairman of the Board.

I have asked the appropriate committees to consider reduced dues during the first few years of practice (instead of just the first year) as a membership incentive. I have also asked that we investigate holding the KMA Annual Meeting over a weekend to decrease time away from practice to see if this might increase participation in our excellent yearly meeting.

#### AIDS

It is imperative that we provide facts and advice to the public, to the Kentucky Legislators, and to physicians on this sinister disease. The hysteria and ignorance surrounding AIDS can lead to many wasteful, ineffective, and counterproductive reactions. Our Ad Hoc Committee on the Development of AIDS Guidelines, under the leadership of

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Doctor Ardis Hoven, has submitted an informative report for your consideration.

## Cost of Care

Each year it seems more apparent that the cost of medical care is at the root of most of our problems. Medical costs are used to justify all types of third-party interference and all manner of political schemes. The high cost of medicine has alienated many of our natural allies and lost us much sympathy in the liability battle. It is difficult for people to understand that physicians have limited control over medical costs. The perception of the "rich doctor" has greatly aggravated this negative attitude.

We must exert what leverage we have in an effort to control health care costs and to make the public aware of the complexity and misconceptions involved in the economics of medicine.

In conclusion, I would like to thank the members of the KMA staff—Bob Cox, Bill Applegate, Bob Klingsmith, Don Chasteen, Lillie Byrd, Donna Young, and all the others who do such an excellent job. In today's complex medical world it is imperative that we have a staff which can maintain continuity and stability. This we have.

I would especially like to thank my partners—Doctor John Perrine, Doctor Adrian Fulmer, and Doctor John Borders for their patience, help, and coverage which made my serving as President possible. Finally, I would like to thank my wife, Barbara, for even greater patience and help.

**Richard F. Hench, MD**  
**President**

## Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the President. The Committee wishes to thank Doctor Hench for his leadership and service to the physicians of Kentucky during his year as President of the Kentucky Medical Association.

Reference Committee No. 1 recommends that the Report of the President be filed.

## Report of the Kentucky Physicians Care Operating Committee

The Kentucky Physicians Care Operating Committee met twice this year, with your Chairman and staff being involved in some aspect of the program on a daily basis throughout the year.

As this report is being written, the Kentucky Physicians Care project is starting its 30th month of operation. During that time, 49,582 individuals have been certified eligible for the program and 19,443 referrals have been made, which we estimate resulted in over 76,000 physician encounters. This latter figure is estimated because, in most cases, once a patient is seen by a participating physician, he or she tends to continue seeing that physician and, as a result, does not continue to call the toll free number.

The Headquarters Office continues to receive telephone inquiries and requests for referral. Over 44,000 calls have been made to the toll free number since the program began in January 1985.

The participation and support of the physicians in Kentucky continues to be excellent. The Committee solicited participation in the fall of 1986, and 86 physicians joined the program. This number, in conjunction with a certain number of physicians who, for various reasons, have dropped out of the program during the past year, brings our current level of participating physicians to 2,248. Thus more than half of the estimated 4,200 physicians who are actively practicing medicine in Kentucky are participating in Kentucky Physicians Care.

The Committee wishes to particularly recognize the continuing support of primary care physicians who remain the initial contact point for the vast majority of referrals made through the program. The contribution made by these men and women is incalculable, and we are very appreciative of their efforts on behalf of the KPC patients and the medical profession in Kentucky.

The Kentucky Health Care Access Foundation continues as the primary funding source for the program. Funding of the Foundation is largely the personal philanthropy of Brereton Jones of Midway. The Foundation underwrites the cost of the toll free telephone lines, two full-time employees, and a third part-time person hired on an as-needed temporary basis. The financial commitment made by the foundation since the onset of the program through June of 1987 was \$172,471.163.

KMA provides space at the Headquarters Office, telephone equipment, supplies, furniture, computer time and equipment, postage, and KMA staff involvement as needed. These "in-kind" contributions totaled \$55,283.35 for the period September 1984 through June 1985; \$25,685.84 for the fiscal year 1985-1986; and \$24,546.72 for the fiscal year 1986-1987, for a total of \$105,515.91 "in-kind" contributions from KMA since the beginning of the program.

The Foundation has initiated discussions with the Kentucky Dental Association and the Kentucky Pharmacists Association, so they might play a more formal role in the provision of services to the people served by KPC and the



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Fair Share program. We are hopeful those discussions will be productive.

The Cabinet for Human Resources has been extremely cooperative during the course of the project. Roy Butler and Janie Miller of the CHR staff have given a considerable amount of time and effort to the program, as have the 1,000 field workers in the 120 county CHR offices across the state.

We feel that the Kentucky Physicians Care Program, by any measurement, has been successful. It has provided a way for a significant number of poor people to gain access to needed medical services. The program has put Kentucky physicians in a positive light with the general public. It has given us credibility with the Legislature. Kentucky has the only statewide effort we are aware of that has actually *done something* about providing health services to its indigent population.

However, the program is not, nor was it ever intended to be, anything other than temporary. It was set up as a formal means of providing a point of access to care and of collecting data on the medical status of the indigent population in Kentucky. The question before the House is, How long can KMA continue to operate the program on a voluntary basis? The cost of the program to KMA has not been extraordinary, but it has not been inexpensive. The number of total participating physicians has remained fairly stable, but there are areas with high numbers of eligible patients and very small numbers of participating physicians, especially primary care physicians. There are several areas of the state with very high patient/physician ratios and those physicians have carried the load in terms of patient care since the program began. The number of eligible patients varies depending on the amount of publicity the program is given from time to time. Even with those facts in mind, the Committee believes there is reason to continue the program through the end of 1988.

Until the Kentucky General Assembly acts to address the indigent health care issue, the need to provide entry into the system for some members of our community will continue. We are aware that several proposals will be introduced into the General Assembly which will attempt to address this issue. We anticipate some of them will call for any indigent care program to be financed solely by a tax on providers. Continuing the Kentucky Physicians Care program will allow us to debate those proposals from a much more creditable position if the program is still in operation.

Therefore, the Committee suggests that KMA continue the Kentucky Physicians Care program through December 31, 1988, contingent on:

1. Program funding being continued, as appropriate, by the Kentucky Health Care Access Foundation, with

KMA contributing in-kind services as done in 1985, 1986, and 1987;

2. A continuing commitment from the Cabinet for Human Resources to evaluate program applicants for eligibility, as is currently being done;
3. The Kentucky Hospital Association continuing its Fair Share program as currently operated;
4. The Kentucky Health Care Access Foundation continuing to vigorously encourage the active participation of all other health care delivery and/or financing organizations in Kentucky Physicians Care or the Fair Share program, as may be appropriate; and
5. The Kentucky Health Care Access Foundation making Kentucky legislators aware of the plight of those ineligible for Medicaid assistance solely because they do not meet the confusing and arbitrary requirements of the Medicaid program, while working to broaden the societal financial obligation necessary to provide care to those in need of such assistance.

Many people help make this program a reality. Participating physicians and their office staffs are the key people in this project, and the Association is very appreciative of their effort. The KPC staff continue to be committed to this project and often make an extraordinary effort to resolve nonroutine problems. The Committee is grateful for their loyalty and dedication. Finally, I want to thank the members of the Operating Committee who have made themselves available since the program began.

**Russell L. Travis, MD**  
Chairman

### RECOMMENDATIONS:

1. **The Committee recommends that KMA continue the Kentucky Physicians Care program through December 31, 1988, contingent on:**
  - A. Program funding being continued, as appropriate, by the Kentucky Health Care Access Foundation, with KMA contributing in-kind services as done in 1985, 1986, and 1987;
  - B. A continuing commitment from the Cabinet for Human Resources to evaluate program applicants for eligibility, as is currently being done;
  - C. The Kentucky Hospital Association continuing its Fair Share program as currently operated;
  - D. The Kentucky Health Care Access Foundation continuing to vigorously encourage the active participation of all other health care delivery and/or financing organizations in Kentucky Physicians Care or the Fair Share program, as may be appropriate; and
  - E. The Kentucky Health Care Access Foundation making Kentucky legislators aware of the plight of those ineli-

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gible for Medicaid assistance solely because they do not meet the confusing and arbitrary requirements of the Medicaid program, while working to broaden the societal financial obligation necessary to provide care to those in need of such assistance.

## Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the Kentucky Physicians Care Operating Committee along with its Recommendation that KMA continue the Kentucky Physicians Care program through December 31, 1988.

Reference Committee No. 1 recommends that Report No. 11 and the Recommendation be adopted.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 1 as a whole.

I would like to thank the other members of Reference Committee No. 1: Charles F. Allnut, MD, Covington; Cecil L. Grumbles, MD, Louisville; Andrew Moore, II, MD, Lexington; and Mary L. Wiss, MD, Pikeville. I also want to thank Jeanette Thompson for her assistance in preparing this report.

## REFERENCE COMMITTEE NO. 1

**John M. Johnstone, MD, Richmond, Chairman**  
**Charles F. Allnut, MD, Covington**  
**Cecil L. Grumbles, MD, Louisville**  
**Andrew Moore, II, MD, Lexington**  
**Mary L. Wiss, MD, Pikeville**

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*Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.*

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## REPORT OF REFERENCE COMMITTEE NO. 2

**John D. Ammon, MD, Florence**  
**Chairman**

Reference Committee No. 2 considered the following Reports and Resolutions:

14. Report of the Scientific Program Committee
15. Report of the Scientific Exhibits Committee
16. Report of the Continuing Medical Education Committee
17. Report of the Council for Continuing Medical Education
18. Report of the Cancer Committee
19. Report of the Emergency Medical Care Committee
20. Report of the Physician Manpower Committee

21. Report of the Interspecialty Council
22. Report of the Hospital Medical Staff Section
  - Resolution A - Smoking in Hospitals (Fayette County Medical Society)
  - Resolution C - Obesity as a Disease (Campbell-Kenton County Medical Society)
  - Resolution N - Hospital Security (Resident Physicians Section)
  - Resolution R - Inappropriate Requirements for Hospital Staff Membership (Davies County Medical Society)

## ITEMS FOR CONSENT

Reference Committee No. 2 reviewed the following items and recommends they be filed or adopted as indicated, by the consent of the House, without discussion:

14. Report of the Scientific Program Committee - filed
15. Report of the Scientific Exhibits Committee - filed
17. Report of the Council for Continuing Medical Education - filed
19. Report of the Emergency Medical Care Committee - adopted
20. Report of the Physician Manpower Committee - filed
21. Report of the Interspecialty Council - filed
22. Report of the Hospital Medical Staff Section - filed

## Report of the Scientific Program Committee

“Medical Excellence ’87” was selected by the Scientific Program Committee as the overall theme for the 1987 KMA Annual Meeting Scientific Program. Tuesday and Thursday morning sessions will focus on issues of current interest from the perspective of the various specialties participating in the Meeting. The Wednesday morning session will focus on “The Impact of Risk Management on Your Specialty,” and will feature a presentation by a speaker knowledgeable in the field of Risk Management, followed by comments from seven members of a reactor panel, representing seven individual specialty groups. The Committee members and specialty society presidents, and/or program planners, have gone to great lengths to bring in some of this country’s outstanding speakers, and we are hopeful that the membership will find their presentations useful.

This year the entire KMA Annual Meeting will again be held at the Ramada Inn/Kentucky Bluegrass EXPO Center in Louisville. Facilities at the Ramada allow us to hold the entire Meeting at a single location.

The Scientific Program was planned last fall and a meeting was held in December with the presidents and/or rep-



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representatives of the 22 specialty groups, which will participate in the Annual Session, to discuss their part in planning the Scientific Program. Specialty group scientific programs held in conjunction with the General Sessions have proven invaluable, and we feel provide an excellent contribution to the continuing medical education of the membership. I personally appreciate the excellent cooperation the Committee has had from the specialty societies in planning the overall Meeting.

This year the specialty groups will follow basically the same format as last year with meetings being held on Tuesday, Wednesday and Thursday afternoons.

This year's Annual Meeting was again accredited for AMA Category I continuing medical education credit and was also approved for CME credit by several specialty societies.

We urge the membership to visit the Technical Exhibit area during the course of the Meeting. We feel it is a most worthwhile and meaningful adjunct to the formal Scientific Program and offers members the opportunity to discuss new products and become familiar with new equipment free from the interruptions and distractions of the office or hospital.

I am very grateful for the efforts of those who have assisted in the formation of this program, particularly the Program Committee, specialty group presidents and program chairmen.

Suggestions for future programs are always welcomed by the Scientific Program Committee.

**Max A. Crocker, MD**  
Chairman

### Report of the Scientific Exhibits Committee

The KMA Scientific Exhibits Committee utilized KMA publications and other mailings to encourage Kentucky physicians to promote the science of medicine during the KMA Annual Meeting. We reviewed and accepted eight applicants who subsequently exhibited in Louisville in 1986. Participating physicians were awarded Certificates of Excellence and Certificates of Appreciation.

The Committee does not hold formal meetings and utilized mailings and telephone calls to approve or disapprove requests. However, occasionally the Committee will recommend changes in the presentation to meet required exhibit criteria.

Once again, the Committee encourages physicians and other groups and organizations to present applications for consideration. We believe this to be an integral part of the

KMA Annual Meeting and an important contribution to its overall success.

**Richard A. Kielar, MD**  
Chairman

### Report of the Council on Continuing Medical Education

The Council on Continuing Medical Education was developed to act as the "provider" arm of the Association's CME activities, and to act as joint or cosponsor for related organizations wishing to provide CME opportunities.

Ongoing discussions have been held with the Accreditation Council for Continuing Medical Education (ACCME), the national parent accrediting group, about KMA's activities. As the national organization has evolved and changed during the past five years, so have its requirements for accredited institutions. Because the Council never received accreditation as a provider directly from ACCME, it was felt appropriate that such authority be sought. This step, although requiring little change in the Council's operation, would give credibility to all of the Council's activities.

Work has begun on the preparation of a formal accreditation application to ACCME. To further enhance credibility, the Council has chosen to seek consultation directly from members of the ACCME in preparation of the application and to review the Council's provider activities.

Our progress to date has been beset with procedural bureaucracy marked by diffusion of authority and inflexibility of complex rules which have severely impeded any effective positive action from ACCME. The Council shall continue its Socratic endeavors and sincerely hopes to persevere in attaining the ultimate goal of formal accreditation from the Delphian agency.

It is important to note the difference between the accreditation of institutions to provide CME and the actual provision of CME offerings. The CME Committee is accredited by the ACCME as the accrediting authority for physicians' educational activities in Kentucky. In turn, institutions that the CME Committee accredits are authorized to provide any level of intensity of activities they choose. The Committee does not accredit individual courses, but the overall program of the institution. The CME Council actually provides or cosponsors CME offerings; it does not accredit them.

As the year progresses, the Council hopes to acquire direct accreditation and to continue its activities in joint sponsorship of courses offered by others.

**James A. Baumgarten, MD**  
Chairman

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## Report of the Emergency Medical Care Committee

For the first time in its 17-year history, the KMA Emergency Medical Care Seminar was held outside of Louisville. The 1987 meeting was conducted in Owensboro at the Executive Inn Rivermont. We enjoyed a highly successful meeting with over 400 people registering. The meeting went extremely well, and the Committee received numerous compliments for providing a different site. We believe the alternate site offered new opportunities to those who had not previously been exposed to the Seminar, and will provide KMA additional audiences as future meetings are conducted. Over 50 Kentucky physicians, nurses, EMTs, paramedics, and others served as faculty.

The 1988 meeting will return to the Executive West Motor Inn in Louisville, which has previously served as the site of the meeting.

During 1987 the Committee sought to involve more physicians and critical care, operating room, and emergency room nurses. While we made some progress, the results were not what we had hoped. The Committee will continue to move in this direction and orient portions of the program toward these groups. However, we do not plan to lose sight of the program's major objective in training and providing continuing education for emergency personnel.

The Chairman takes this opportunity to especially applaud the efforts of several nonphysicians who have contributed to the Seminar's success. Cheryl Westbay, RN, of Louisville has been a major contributor to the program for many years. Ms. Westbay has served on the Planning Committee annually, coordinates all of the CEUs for nursing, and is the major "promotion ambassador" of the program. In addition, we wish to thank Mr. Tommy Thompson of Frankfort for his role in representing the EMTs and paramedics. Mr. Thompson also serves on the Planning Committee.

On behalf of the Committee, we sincerely appreciate the support of the KMA House of Delegates and Board of Trustees for their continuing endorsement of the program. We recommend the continuation of the Emergency Medical Care Seminar in 1988.

**E. Truman Mays, MD**  
Chairman

### RECOMMENDATIONS:

1. The Emergency Medical Care Committee recommends that the Emergency Medical Care Seminar be continued in 1988.

## Report of the Physician Manpower Committee

The Physician Manpower Committee continued its studies into areas directed by the Board of Trustees. Specifically, the Committee is attempting to determine if there is an excess of physicians in the state or if an excess will likely occur; to document these concerns; and to consider any physician maldistribution problems.

It was determined during last year's work that there was not an oversupply of physicians, but that large rural areas suffer from maldistribution. It was learned that any comprehensive study would require a large amount of financial and manpower resources, and the Committee did not feel it had sufficient information to direct such a study. The reason for this was that evaluation of the *need* for physician manpower is difficult, if not impossible, to determine.

Review of efforts by other states, as well as national studies conducted by the US government and others, showed that five common methods have been used to determine physician need. The first, comparison of the population ratio to physicians present in practice, does not appear to be an effective measurement because the medical needs of populations vary greatly. Additionally, maldistribution problems are not reflected, nor are the number of physician working hours.

The accessibility of physicians is not an adequate measurement of need. Even though physicians concentrated in large cities would seem to obviate accessibility, this method does not take into account patient load criteria, time spent waiting in physicians' offices, or travel time.

Another method used to determine manpower needs has been through professional and community satisfaction. Using this method, both physicians and populations are surveyed to see if they feel manpower needs are sufficient, but this method does not take into account the real need versus the expectations of both groups.

Another method used has had a financial basis. If physician incomes rise, this method assumes there is a manpower need, and if incomes drop, this assumes an excess. The inadequacies of this method are obvious, because incomes cannot be objectively related to need.

A final method often used, which was employed in the Graduate Medical Education National Advisory Committee (GMENAC) study, makes use of a number of subjective variables in the determination of physician need. These include the frequency of illness in a given population, the type of individual physician services needed to treat a patient's illness, and the amount of time expended by all providers of care associated with the given illness. This methodology is most often used in making needs assess-



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ment, but the subjectivity of the criteria is obvious. This method cannot take into account a significant quality-of-care issue. For example, if a given physician conducts a high number of procedures, it is assumed his proficiency will increase and the time needed to perform the procedure will be reduced. Conversely, the fewer procedures done, the less proficient the physician may likely be, and his expertise will suffer.

It was noted that studies done recently in Oklahoma, New York, and Wisconsin had all used the GMENAC model, and that Iowa and Georgia were in the process of conducting such studies. These studies will be acquired and reviewed to try to determine if a similar undertaking would be appropriate for Kentucky.

Larry Fowler, representing the Council on Higher Education, indicated that the Council intended to conduct a computer study using the GMENAC method as a "trial" and see if the resulting information would be applicable to the Manpower Committee's concerns. When the study is conducted, input will be sought from the Department for Health Services, both medical schools, and KMA.

For purposes of this study, it was noted that Kentucky's rate of growth relative to the nation is higher, and the ratio between physicians and population is less than the national average. Additionally, medical school enrollment decreases were put into place in 1982, and are beginning to have an observable effect.

Don Coffey, with the Department for Health Services, indicated that his agency has a plethora of information on physicians and population by county, although it is essentially restricted to primary care physicians. He suggested the possibility of a study to determine manpower needs based on physician productivity compared with population by county. One difficulty with such a study is that it might not reflect "medical trade" patterns. Some patients typically seek care out of their home county for a variety of reasons.

Along these lines, both medical school representatives indicated that they were engaged in tracking studies to determine where students and residents were locating after training, as well as original residence of physicians undergoing training in Kentucky. Also, both schools are working with Mr. Coffey's Department to identify medical manpower needs to students to guide them in their training goals.

It was noted that there continues to be a lack of information with regard to the distribution problem. Even though physicians are concentrated in urban areas of the state, the numbers in these areas continue to increase. It would seem that the pressures of liability insurance rates, as well as competition, would have a positive effect on distribution,

coupled with the trend toward more primary care, which was liability-driven. Conversely, it would appear that there are few incentives to attract physicians to underserved areas, particularly in specialty fields, because of a lack of existing support systems. To this end, it was thought to be helpful if the Committee could speak with physicians recently locating in practice to determine what variables influenced their practice choice.

The Committee felt its most appropriate endeavor would be to continue to review manpower study methodologies, existing physician and population data, and maldistribution issues, and, with this information, try to decide on further appropriate studies.

**Robert R. Goodin, MD**  
**Chairman**

### **Report of the Interspecialty Council**

The KMA Interspecialty Council is composed of 22 specialty groups. The Interspecialty Council's purpose is to focus attention upon issues of particular significance to a specialty group and provide a forum and a direct conduit to the KMA Board of Trustees and House of Delegates.

The primary concern of the Council, according to its members, is the liability problem. While each specialty group is represented on the Ad Hoc Committee on Professional Liability Insurance, the Council in 1987 discussed, in detail, problems inherent in the present tort system and its effect upon the patient/physician relationship.

Carl L. Wedekind, Jr., President, KMIC, gave a slide presentation on "Medical Malpractice: A No Fault Approach." This presentation had previously been given to the Kentucky General Assembly Task Force on Liability and Insurance. Mr. Wedekind's Patient Compensation Plan (PCP) would eliminate the lengthy and costly method now used to compensate patients who suffer injury due to medical malpractice.

Under the present system approximately 62% of the dollar goes to the system with only 38% to the claimant. The plan, if adopted, would be modeled after the Workers' Compensation program and would be funded by the State. Individuals would elect to come under PCP.

Fred C. Compton, Vice President, Blue Cross and Blue Shield of Kentucky, discussed the proposed diagnostic guidelines. These guidelines are scheduled to be implemented by Blue Cross and Blue Shield of Kentucky on January 1, 1988. Mr. Compton noted that it is important to understand the intent of the guidelines. The main purpose is to prevent overutilization of tests and to educate, and

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they are not administrative procedures. Mr. Compton asked that each member take guidelines back to their individual specialty societies, discuss and review, and make comments.

The key findings of a public survey conducted by Hamilton, Frederick and Schneiders of Washington, DC were outlined to the Council. The survey of 600 Kentuckians regarding the liability crisis confirmed the public's concern and urged legislative relief. The survey also reaffirms the importance of public interest, and the need for physicians to talk to individual legislators in their communities. Obtaining physicians' support to lobby their legislators will be the key to tort reform in Kentucky.

The Council discussed the need for each specialty group planning legislative efforts to first present legislation to the KMA Committee on State Legislative Activities prior to its introduction in Frankfort. The Chairman emphasized the need for medicine to present a coordinated effort during the 1988 Kentucky General Assembly.

Resolution L was discussed by the Council. The Resolution states: "RESOLVED, that as a matter of good patient care, second opinion consultants should provide, in a timely manner, a copy of all second opinion consultation reports (regardless of whether they are supportive or adverse) to the initial physician prior to a scheduled surgical procedure." The Council determined that the Resolution, presented by Franklin County Medical Society, represented sound medical practice.

KMA continues to provide specialty groups access to administrative services. The services include filing, typing, printing, meeting scheduling, mailings, membership programs, and other services upon request. Several specialty groups utilize these services which provide strong continuity to the organizations. We urge groups to consider the Specialty Services Division which was created by recommendation from the Interspecialty Council to the KMA House of Delegates.

**Paul J. Parks, MD**  
Chairman

### **Report of the Hospital Medical Staff Section**

The Hospital Medical Staff Section (HMSS) held its annual meeting on May 13, 1987. It was noted that of the 124 hospitals in Kentucky, 98 of them are accredited by the Joint Commission for the Accreditation of Hospitals (JCAH). The HMSS has been in existence now for three years, having begun in October of 1984, and has 79 representatives who were elected by the medical staffs of their

respective hospitals; therefore, the KMA-HMSS does represent a majority of the Kentucky hospitals approved by the JCAH. The HMSS reviewed its Constitution and Bylaws and has made a recommendation to the Board of Trustees regarding terms of HMSS members.

During the HMSS annual meeting, a general review was conducted of matters referred to the HMSS since its formation, and the Section feels a review of some of those items is in order.

Resolution L—Quality Assurance Plan (1984) - called for KMA to develop a model quality assurance plan. It was soon determined that KMA was unable to develop a model quality assurance plan, and AMA indicated it would not attempt to do this unilaterally, but would, instead, work through its members on the JCAH to accomplish this task. JCAH is currently working on the development of such a quality assurance plan, and the KMA-HMSS will be monitoring that progress.

Resolution P—Equitable arrangement for liability coverage (1985) - called for KMA to take whatever steps necessary to create a fair and equitable arrangement for liability coverage between physicians and hospitals. This is a subject of continuing consideration by the leadership of KMA and the Kentucky Hospital Association.

The Board of Trustees had asked the HMSS to examine the organ donor legislation and the brain death legislation passed by the 1986 General Assembly to be sure their passage did not conflict with existing house staff rules. This was accomplished during the 1986 annual meeting of the HMSS (held during KMA's Annual Meeting) and it was determined that no conflict exists.

Resolution B—Disclosure of Hospital Patient Care Activities (1986). This Resolution dealt with medical staffs being informed in advance if the hospital is going to be involved in joint ventures which could adversely affect patient care. This Resolution was forwarded to all chiefs of staff, hospital administrators, and members of the KMA-HMSS. The matter has also been discussed with the Kentucky Hospital Association and will be an on-going issue.

Resolution D—Alternatives to Malpractice Insurance (1986). This Resolution called for KMA to explore the feasibility and risks to physicians and medical staffs of possible alternatives to malpractice insurance.

Information relative to various no-fault proposals, as well as other alternative proposals for dispute resolution, have been and are continuing to be reviewed. Such alternatives have potential, but because they are modeled after the Workers' Compensation Program, the stigma of the problems surrounding this Program in Kentucky will probably prohibit serious consideration of any alternative mechanisms at this time. This matter has also been referred to the



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Ad Hoc Committee on Professional Liability Insurance, and the HMSS feels that the PLI Committee should keep this under advisement for possible action at the appropriate time.

This year's HMSS annual meeting program was devoted to professional liability issues. Richard F. Hench, MD, KMA President, spoke of the importance of the KMA-HMSS because of the need for good working relationships between hospitals and physicians, particularly in light of the liability climate.

Doctor Hench discussed the activities of the Kentucky Insurance and Liability Task Force, a 22-member panel appointed by the 1986 Kentucky General Assembly to investigate the professional liability insurance situation and make recommendations to the 1988 Legislature; Doctor Hench is KMA's representative on this Task Force. It is hoped that the recommendations made by the Task Force will be such that KMA can lend its support to them.

Carl L. Wedekind, Jr, President of the Kentucky Medical Insurance Company, presented information, which he authored, called an "Alternate Proposal for Compensating Injuries in the Health Care Delivery System." His proposal is a no-fault plan to compensate injuries occurring in the delivery of health care, similar to the approach used under the original Workmen's Compensation System applying to injuries in the workplace.

Don R. Chasteen, Director of KMA Specialty Services and Public Affairs, spoke about KMA's Professional Liability Campaign, adopted by the 1986 KMA House of Delegates. He brought the HMSS members up to date regarding the timetable of that campaign and the progress made to date. He also showed the slide presentation which KMA Trustees are making to various county medical societies, hospital medical staffs, and specialty groups. Mr. Chasteen encouraged those present to make a special effort to see that their hospital's medical staff allows time at a meeting for this presentation, and we join him in encouraging medical staffs, county societies, and others to contact the KMA office to set up a meeting for this purpose.

William E. Doll, Jr, Chairman of the Tort Reform Association of Kentucky (TRAK), presented information about this group, which is a coalition of trade, business, professional, and municipal organizations whose goal is to effect long-term, meaningful reform of Kentucky's civil justice system in order to make liability coverage available at affordable rates. He noted that TRAK had made a presentation to the Kentucky Insurance and Liability Task Force and shared that presentation, through slides and verbal remarks, with Section members.

As Chairman of the KMA Hospital Medical Staff Section, I would like to take this opportunity to express appreciation to the medical staffs of those hospitals who have

chosen to be active in the KMA-HMSS. I would encourage those of you who have not become active to do so as this is a positive step toward assuring good working relationships between physicians and hospitals. I would also like to express my appreciation to the members of the Steering Committee of the Hospital Medical Staff Section for the extra effort they have given toward the establishment of the HMSS and for their continuing efforts to see that it remains an effective KMA activity.

**William B. Monnig, MD**  
**Chairman**

### END OF CONSENT CALENDAR ITEMS

#### **Report of the Continuing Medical Education Committee**

The Committee on Continuing Medical Education (CME) addressed two major concerns this year. The first related to KMA's status as an accrediting organization for continuing medical education, and the second related to a referral from the House of Delegates on the issue of mandatory participation in CME as a condition of licensure.

Last year it was reported that KMA's accreditation program was undergoing some changes as the result of a review by the Accreditation Council on Continuing Medical Education (ACCME), which is the national accrediting agency for medical education at the student, resident, and practicing physician levels.

As seen in the Report of the Council on CME, the provider arm of CME for KMA, application is being made directly to the ACCME for accreditation as a provider. Concurrently, the Committee on CME continues to revise its process and procedures for accrediting institutions to provide their own CME, and during the coming year, this activity will intensify. Resurveys will begin on all institutions accredited to date, and surveys will be conducted on institutions which have submitted new applications. This activity will begin in earnest starting at the first of the calendar year, after further refinement of the program and input from an ACCME consultant.

Of major concern for the last two years to the House of Delegates has been the issue of mandatory participation in CME as a condition of licensure. Last year the Committee recommended to the House that the Licensure Board require 15 hours of CME each year; that provision should be made to minimize profits to providers of CME; that there be uniform reporting of credits; that procedures should be established for exceptional cases; and that KMA should act in an advisory capacity to the Licensure Board in imple-

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menting the program. The consensus of the Reference Committee testimony was opposition to mandatory CME, and the House action was referral back to the Committee for further study.

In its study, the Committee accumulated data from other states about mandatory CME, acquired information from the Board of Medical Licensure, and had discussions with KMA legislative representatives. It was learned that 22 other states require participation in CME as a condition of licensure and 11 states require participation as a condition of medical association membership. In four states mandatory CME had been required for licensure, but this condition was rescinded. In checking with the states it was learned that the reason in each case related to overwhelming administrative burdens, cost/benefit ratios, and reporting difficulties. Of the other states where mandatory CME remains intact, the hourly requirements vary widely.

Representatives from the Board of Medical Licensure advised that the Board has the authority to impose participation in CME but has not invoked that authority, based on a recent consensus among the Board members that mandatory CME is ineffective. The Licensure representatives pointed out that of the 22 major American specialty boards, 14 have time-limited certification, and 35 medical specialty organizations sponsor self-assessment programs. The professional review organization for Kentucky may impose CME on physicians with aberrant practice patterns, and many HMO and PPO contracts require CME as a condition of participation. It was also pointed out that the Joint Commission on the Accreditation of Hospitals was planning to require that hospitals develop risk management and quality assurance programs internally.

From a legislative perspective, it was pointed out that every health profession in the state except physicians requires its members to participate in continuing education as a condition of licensure or certification, and it is sometimes difficult to justify to legislators a lack of mandatory CME for physicians. There is an ongoing possibility that the Legislature may impose mandatory CME, even though it is unlikely that the lack of mandatory CME would influence any given legislative vote. At the same time, it was suggested that this lack of mandatory CME does have some influence on the legislators' views of the profession.

It was the Committee's feeling that its actual charge was to try to determine the merits of mandatory CME, and the consensus was that there was no way to confirm such benefits, although there may be political advantages. Given the information presented, the Committee felt that an alternative to mandatory CME might be appropriate.

Given the fact that most physicians already participate in CME and that participation by mandate would provide no

documentable benefit, an attractive alternative that would suit many perspectives would be the development, probably through hospitals, of programs in risk management and quality assurance which would be related to liability insurance concerns. Likely principals in the development of such a program would be the Board of Medical Licensure, the medical schools, and professional liability insurance carriers.

It was felt that this activity would be of direct benefit to the profession and would be attractive to insurance carriers from the standpoint that potential liability situations would be reduced, that the medical schools could provide educational process input, and that the Board of Licensure could represent public concerns.

Based on these discussions, the Committee developed two recommendations concerning mandatory CME, which appear following this report. Hopefully, these recommendations provide a practical treatment of the mandatory CME issue which will result in a practical value to physicians and patients.

**James E. Redmon, Jr, MD**  
**Chairman**

### RECOMMENDATIONS:

1. The CME Committee recommends that KMA go on record in opposition to mandatory CME because there is no documentation that mandated CME results in enhancement of competence; mandatory CME would impose an intolerable administrative burden on the Board of Medical Licensure, which currently has no available funds to operate such a program; and because most physicians already participate in CME through their medical specialties and local hospitals.
2. The CME Committee recommends that KMA work in conjunction with the Board of Medical Licensure, medical schools, and professional liability insurance carriers in the state to develop a CME program on risk management and quality assurance. The program will be offered several times during the coming year in several locations easily accessible to physicians. Should mandatory CME legislation be implemented, this group might be utilized to develop guidelines.

### Recommendations, Reference Committee No. 2:

Reference Committee No. 2 reviewed Report No. 16, Report of the Continuing Medical Education Committee, and its two recommendations.

The Reference Committee first discussed Recommendation 1, and recommends that it be amended to read as follows:



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“The CME Committee recommends that KMA go on record in concerned opposition to mandatory CME. [because] The KMA supports the concept of voluntary CME. There is no documentation that [mandated] mandatory CME results . . .”

Reference Committee No. 2 therefore recommends that Report No. 16 be adopted as amended.

### Report of the Cancer Committee

The KMA Cancer Committee met on one occasion during the Associational year. Major topics included the statewide tumor registry; statewide mammography campaign; revision of the booklet, *Breast Cancer: Treatment Options*; and activities of the Kentucky Division of the American Cancer Society.

Gilbert H. Friedell, MD, Committee member, provided an update on the statewide tumor registry. The registry is a microcomputer-based system for collecting, managing, and analyzing information related to the diagnosis and treatment of cancer patients in Kentucky. The system is valuable to physicians in making selection of therapy for patients, and the major intent is to get as many hospitals as possible to participate. The Kentucky Community Cancer Program (KCCP) has a system whereby data system coordinators are available to assist hospitals in setting up the system, training personnel, abstracting data, analyzing the information, and maintaining the system.

The system was demonstrated at the 1986 KMA Annual Meeting and the Committee believes that only physicians can assure hospital participation. We believe that there is a need to find out how many people are aware of the tumor registry and the Committee plans to explore ways to expand physician knowledge of the registry.

Cost of the system (per hospital) is approximately \$11,000 and the greatest recurring cost is the people cost—salaries for abstractors which vary between \$15,000 and \$20,000.

Jerry B. Buchanan, MD, President of the Kentucky Chapter of the American College of Radiologists, gave a presentation on the statewide mammography campaign, a two-phased program based on a program conducted in Illinois. The program offered free mammograms for American Cancer Society blockworkers who, in turn, discussed the program with women in their communities regarding mammography screening. A Kentucky pilot program was designed and conducted in three counties—Jefferson, Fayette, and Montgomery.

The second phase for all Kentucky women was conducted in May on a statewide basis. Letters were mailed to all radiologists asking them to participate and inform pa-

tients about the low-cost mammography screen designated for the month of May, which cost patients approximately \$48. The primary purpose of the program was to offer screening for a specified period of time in order to bring women into the system and encourage them to make mammography part of their normal routine. Certified facilities were used for screening.

The Committee noted that physicians need to be made aware of the program's existence and recommended that an article be placed in the “Communicator” and that a letter, along with an American Cancer Society brochure, be mailed to KMA members. The purpose of the letter was to inform physicians of the program. The letter and additional pamphlet were subsequently approved by the KMA Board of Trustees and mailed with the “Communicator” in May.

Condit Moore, MD, and Gilbert Friedell, MD, discussed and noted the revisions recommended for the booklet *Breast Cancer: Treatment Options*.

As most physicians are aware, the 1984 Kentucky General Assembly passed legislation requiring that the booklet be presented to women with breast cancer. The original bill, with severe penalties, was successfully defeated by KMA. However, the milder version was adopted overwhelmingly by the General Assembly, but without penalties. The law **REQUIRED** that the Ephraim McDowell Cancer Network and the Brown Cancer Center directors present a booklet to the Cabinet for Human Resources for printing and mailing to Kentucky physicians.

The revision of the proposed booklet has been reviewed by all specialty groups, surgical societies, KMA Board of Trustees, and numerous other individuals. Their recommendations have been forwarded to the two cancer center directors, who are responsible for the content, for consideration.

The Committee has recommended that the cover be changed so that physicians and patients would be aware that the booklet has been revised. In addition, it was recommended that “1987 edition” be placed on the inside title page.

Wayne B. Miller, Executive Director of the Kentucky Division of the American Cancer Society, reported that April was designated as Cancer Detection Month. Seminars were sponsored by the American Cancer Society at the University of Louisville on April 1 and the University of Kentucky on March 31. Classes were cancelled by the University of Kentucky to permit medical students' attendance.

Committee member Sue Winard, MD, presented a proposal on smoking and public health. The Committee unanimously endorsed the following proposal.

The KMA Cancer Committee notes that smoking is directly related to 500,000 deaths per year in the United States

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from cancer, heart disease, and emphysema. Smoking-related cancers are one-third of all cancers, causing more than 150,000 deaths per year. Smoking is not only harmful to the person smoking, but those exposed to other people's smoke have a higher risk of lung cancer, heart disease, emphysema, and congestive lung disease.

The Committee believes that there is no more effective means toward caring for patients than by practicing **both** preventive and interventional medicine.

The Kentucky Medical Association Cancer Committee recommends that the KMA House of Delegates call for immediate restriction of smoking in hospitals to closed, well-ventilated areas within Kentucky hospitals, concomitant with public education toward the goal of a smoke-free environment.

The Committee appreciates the opportunity to be of service to the Association and hopes that its efforts contribute to the ongoing efforts of science to provide answers to the cancer dilemma.

**P. Raphael Caffrey, MD**  
**Chairman**

### RECOMMENDATIONS:

1. The Cancer Committee recommends immediate restriction of smoking in hospitals to closed, well-ventilated areas within Kentucky hospitals, concomitant with public education toward the goal of a smoke-free environment.

#### **Resolution A** **Fayette County Medical Society** **Smoking in Hospitals**

WHEREAS, smoking is directly related to 500,000 deaths per year in the United States from cancer, heart disease and emphysema, and

WHEREAS, smoking-related cancers are one-third of all cancers, causing more than 150,000 deaths per year, and

WHEREAS, smoking is not only harmful to the person smoking, but those exposed to other people's smoke may have a higher risk of lung cancer, heart disease, emphysema and congestive lung disease, and

WHEREAS, there is no more effective means towards caring for our patients than by practicing *both* preventive and interventional medicine, now therefore be it

RESOLVED, that the Kentucky Medical Association seek appropriate restriction of smoking in Kentucky hospitals to areas where there would not be cross contamination of smoke

exposing nonsmokers, concomitant with public education towards the goal of a smoke-free environment.

### **Recommendations, Reference Committee No. 2:**

The Reference Committee reviewed Report No. 18, Report of the Cancer Committee, and Resolution A, Smoking in Hospitals, introduced by Fayette County Medical Society. Both the Report and the Resolution call for the restriction of smoking in hospitals and have identical intent.

Reference Committee No. 2 recommends that both Report No. 18 and Resolution A be adopted.

#### **Resolution C** **Campbell-Kenton County Medical Society** **Obesity as a Disease**

WHEREAS, *Dorland's Medical Dictionary* defines "disease" as: "A definite morbid process having a characteristic train of symptoms; it may affect the whole body or any of its parts, and its etiology, pathology, and prognosis may be known or unknown," and

WHEREAS, obesity is a process of overconsumption of calories in relation to energy expenditure, resulting in hypertrophic and hyperplastic fat cells, and

WHEREAS, the endocrine and metabolic changes of excess consumption of calories and resulting fat tissues lead to malfunction of body organs and tissues, and

WHEREAS, the degree of illness caused by obesity requires a medical evaluation and diagnosis to evaluate metabolic changes, distribution and quantity of body fat, genetics, and degree of health risk, and

WHEREAS, the health risk factors associated with obesity, ie, cardiovascular disease; hypertension; diabetes mellitus, type II; cancer; anesthesia; and major abdominal and thoracic surgery, are directly proportional to excess weight or Body Mass Index, and

WHEREAS, the diseases to which obesity predisposes are among the major causes of escalating care costs, and

WHEREAS, the 1985 National Institutes of Health (NIH) Consensus Development Conference on Health Implications of Obesity declared that obesity is a distinct disease entity, and

WHEREAS, this same conference report confirms that there is a clear association between obesity and decreased longevity and that the greater the weight, the higher the mortality, and

WHEREAS, the above NIH report confirms that obesity is clearly associated with coronary artery heart disease; hypertension; adult-onset diabetes mellitus; hypercholesterolemia;



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lemia; and increased risks for cancers of the colon, rectum, and prostate in men, and cancers of the gallbladder, biliary passages, breast, cervix, uterus, ovaries, and endometrium in women, and

WHEREAS, the same NIH report stated that individuals who eliminate excess body fat reduce to normal their risks of adverse health effects, and

WHEREAS, obesity can be treated by medical and, if necessary, surgical methods, now therefore be it

RESOLVED, that obesity is recognized by the Kentucky Medical Association and the American Medical Association as a disease requiring diagnosis, risk assessment, and medical and/or surgical treatment.

### Recommendations, Reference Committee No. 2:

The Reference Committee considered Resolution C, Obesity as a Disease, submitted by the Campbell-Kenton County Medical Society. It was noted that the Resolution calls on the KMA House of Delegates to adopt a position on behalf of the AMA.

The Committee was in agreement that the Resolution did not provide a specific definition of obesity and it was noted that KMA cannot speak for the AMA. For these reasons, Reference Committee No. 2 recommends that Resolution C be referred back to its original author.

### Resolution N Resident Physician Section Hospital Security

WHEREAS, violent attacks on residents, students, and staff have occurred in hospital wards, emergency rooms, corridors, and parking areas, and

WHEREAS, behavior with respect to sudden violence is difficult to predict, and

WHEREAS, security is the only method of precaution, now therefore be it

RESOLVED, that the Kentucky Medical Association urge the Kentucky Hospital Association to call on all hospitals to institute and/or maintain increased security measures such as general identification, patrols, visual monitoring systems, and other systems as necessary in order to protect staff, patients, employees, residents, and students, both in-house and on surrounding grounds and parking areas.

### Recommendations, Reference Committee No. 2:

The Reference Committee reviewed Resolution N, Hospital Security, introduced by Resident Physicians Section, and recommends that it be adopted.

### Resolution R Daviess County Medical Society Inappropriate Requirements for Hospital Staff Membership

WHEREAS, liability insurers of hospitals continue to demand that hospitals enforce increasing limits of malpractice insurance for staff membership, and

WHEREAS, there has been no reasonable restraint on this indirect tax on the public, and

WHEREAS, the primary function of hospitals and physicians should be to help people maintain life and health and not to compensate for liability or for inevitable bad results, and

WHEREAS, the competence of a physician is established by factors other than insurance coverage, and

WHEREAS, it is not appropriate for an insurance company to dictate the requirements for membership on a medical staff, now therefore be it

RESOLVED, that each physician should maintain what he or she determines to be a reasonable amount of liability insurance, and be it further

RESOLVED, that a physician need not divulge whether such coverage exists, and be it further

RESOLVED, that each physician should reject efforts by insurance companies to set requirements for medical staff membership.

### Recommendations, Reference Committee No. 2:

The Committee next considered Resolution R, Inappropriate Requirements for Hospital Staff Membership, introduced by Daviess County Medical Society. The Committee considered Resolution R and realized that this is a multifaceted problem which needs more study. It is the sense of the Committee that physicians, acting through their respective hospital staffs, should encourage governing bodies not to shift hospital operating costs to staff members by requiring the staff to maintain unreasonably high levels of liability insurance. Reference Committee No. 2 recommends that Resolution R be referred to the Board of Trustees and that this issue be considered by the Board of Trustees at its December 1987 meeting.

Reference Committee No. 2 recommends the adoption of the report of Reference Committee No. 2 as a whole.

Mr. Speaker, I would like to thank the other members of the Committee: Russell H. Davis, MD, Pikeville; William D. Medina, MD, Lexington; R. Wathen Medley, Jr, MD, Owensboro; and William H. Mitchell, MD, Richmond, for time spent in listening to testimony and for their opinions and assistance in preparation of this Committee report. I would also like to thank our secretary, Beth Thomas.

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## REFERENCE COMMITTEE NO. 2

**John D. Ammon, MD, Florence, Chairman**  
**Russell H. Davis, MD, Pikeville**  
**William D. Medina, MD, Lexington**  
**R. Wathen Medley, Jr, MD, Owensboro**  
**William H. Mitchell, MD, Richmond**

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*Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.*

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## REPORT OF REFERENCE COMMITTEE NO. 3

**John R. Allen, MD, Lexington**  
**Chairman**

Reference Committee No. 3 considered the following Reports and Resolutions:

23. Report of the Maternal Mortality Study Committee
24. Report of the Committee on National Legislative Activities
25. Report of the Committee on State Legislative Activities
26. Report of the Committee on Impaired Physicians
27. Report of the Committee on Care for the Elderly

Resolution K - Seat Belt Safety (Jefferson County Medical Society)

Resolution L - Access to Tobacco by Children (Resident Physicians Section)

### Professional Liability Issues

5. Report of the Chairman, Board of Trustees, Report of the Ad Hoc Committee on Professional Liability Insurance, *only*

Resolution D - Malpractice Insurance Tail Coverage (Allen County Medical Society)

Resolution E - Prorated Malpractice Insurance Coverage (Allen County Medical Society)

Resolution F - Patient Compensation Fund (Jefferson County Medical Society)

Resolution G - Insurance Review Board (Jefferson County Medical Society)

Resolution U - Insurance Reimbursement and Liability Insurance Premiums (Floyd County Medical Society)

## Indigent Medical Care

5. Report of the Chairman, Board of Trustees, Report of the Ad Hoc Committee on Indigent Medical Care, *only*

## ITEMS FOR CONSENT

Reference Committee No. 3 reviewed the following items and recommends they be filed or adopted as indicated by the consent of the House, without discussion:

23. Report of the Maternal Mortality Study Committee - filed
24. Report of the Committee on National Legislative Activities - filed
25. Report of the Committee on State Legislative Activities - adopted
26. Report of the Committee on Impaired Physicians - filed
27. Report of the Committee on Care for the Elderly - filed

Reference Committee No. 3 would like to express appreciation to the Chairmen and members of the committees, whose reports have been filed or adopted, for the time and effort spent in gathering this information for the House of Delegates.

## Report of the Maternal Mortality Study Committee

The Maternal Mortality Study Committee met once during the 1986-1987 Associational year to consider matters falling within its jurisdiction. The date of the meeting was September 23, 1986. The meeting convened at 7:00 AM and lasted 1½ hours. Five cases were discussed, and the accompanying table shows the disposition of the cases.

The Committee reviewed the material gathered by John A. Petry, MD, from sources in Frankfort. Doctor Petry then contacted various physicians and hospitals involved. The deaths are considered at length by members of the Committee, and time is given to deliberation of etiologic factors. The accompanying information shows the number of deaths discussed, and whether they are direct or indirect obstetrical deaths. It should be stated that an indirect obstetrical death is one that would occur whether the patient was pregnant or not. Direct obstetrical death is one with factors in the pregnancy causing maternal demise. This does not necessarily impute fault on the part of the people or the institution caring for the patient.

A chart is also appended showing the maternal death rate in Kentucky and the numbers to date. In its deliberation, the Committee considers the cause of the maternal death



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and whether there is any one institution, physician, or locality that seems to have a repetitive problem needing further study or action. This does not seem to be the case. It is noted that there are more deaths in Fayette and Jefferson Counties, but these are attributed to the fact that these are large population areas and also because there are centers in these areas that can care for high-risk obstetrical situations.

The Committee found it necessary to meet only once this year because of the few cases. It is apparent that in the five cases reviewed in September, only two were direct obstetrical deaths. We hope this record continues.

It is a great pleasure to work with and chair the Maternal Mortality Study Committee. The very diligent work of Doctor John Petry should again be acknowledged, for he spends many hours compiling the material and analyzing it for presentation to the members of this Committee.

**John W. Greene, Jr, MD**  
**Chairman**

Cases Discussed – September 23, 1986 5 Maternal Deaths		
		Autopsy
1. Indirect	Maternal death by murder – strangulation	Yes
2. Direct	Preventable factors, poor patient compliance – sepsis. Death at home 3 weeks after delivery	Yes
3. Indirect	Fatal gunshot wound	Yes
4. Direct	Complicated trophoblastic disease	Yes
5. Indirect	Ruptured abdominal aneurysm	No

Maternal Deaths-Kentucky		
Year	Total Deaths	Total Rate (No./100,000)
1966	34	58
1967	21	36
1968	15	27
1969	17	30
1970	22	37
1971	20	33
1972	22	36
1973	16	30
1974	15	28
1975	15	27
1976	13	24
1977	13	21
1978	8	14
1979	9	10
1980	17	29
1981	6	10
1982	8	21
1983	6	10
1984	6	10

TABLE 1-1. Maternal Mortality in the United States 1935-1982				
Maternal Deaths		Rate Per 100,000 Live Births		
Year	Number	Total	White	Other
1935	12,544	582.1	530.6	945.7
1940	8,876	376.0	319.8	773.5
1945	5,668	107.2	172.1	454.8
1950	2,960	83.3	61.1	221.6
1955	1,901	47.0	32.8	130.3
1960	1,579	37.1	26.0	97.9
1965	1,189	31.6	21.0	83.7
1970	803	21.5	14.4	55.9
1975	403	12.8	9.1	29.0
1980	334	9.2	6.7	19.8
1982*	330	8.9	—	—

\*Provisional.

### Report of the Committee on National Legislative Activities

The Committee on National Legislative Activities consists of physician Key Contacts to each of Kentucky's Senators and Representatives. The Committee does not hold regular meetings; rather, its work is carried out through the channel of contacts with the Congressmen. This year saw

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an unusually high number of contacts because of the many issues that confronted Medicine.

Budget reductions and deficits on the national level have created a legislative obligation to allocate a proper level of funding to governmental medical programs. Reimbursement to physicians and other restrictions are convenient methods to save money. The effect of these measures on quality of care apparently has received little attention except from physicians. While many physicians have felt the pressure of Congressional activities in their day-to-day practices, the federation of county, state, and national medical organizations has achieved some notable successes.

In May this year the Health Care Financing Administration (HCFA) enacted significant changes to the sanction process of professional review organizations (PROs). These changes were the result of discussions and consensus among the American Medical Association, the American Association of Retired Persons (AARP), HCFA, and the Inspector General's Office. Originally, the sanction process called for internal review of claims, a summary decision to sanction a physician by the PRO made directly to HCFA, and a publication of sanction proceedings against individual physicians in the local media.

The new agreement now provides more notice to the physician about the consequences of the internal review, the basis of any charges, and the physician's rights. It also gives the physician being reviewed the right to counsel, an extension of time for the review for good cause, the use of expert witnesses, a five-day period for rebuttal after the review, and prevents media publication of the sanction if the physician notifies his patients. Additionally, the agreement requires the presence of the PRO's reviewing physician at the hearing but prohibits him from voting on the sanction process, and allows the presentation of new evidence and witnesses if the sanction is heard before an administrative law judge.

Prior to this agreement being reached, the AMA had instituted suit against the measure, as well as cooperating in similar suits instituted or considered in Texas, California, and Virginia.

There is currently a dispute regarding drug dispensing by physicians. H.R. 2168, which would prevent physician dispensing, has failed to clear the House Ways and Means Committee after several votes, thanks in part to AMA's legislative efforts. At issue, from the AMA viewpoint, is the right of the physician to practice medicine, Federal intrusion into the practice of medicine, states' rights, and the authority of state licensing boards to regulate practitioners. Most observers agree that the AMA viewpoint will prevail on this issue.

On a related matter, H.R. 1207, dealing with drug sam-

pling, has been passed by the House of Representatives. This measure assures the sampling of prescription medications by pharmaceutical representatives to physicians.

The federation has also maintained an active involvement in professional liability insurance issues. The AMA-authored S. 1315, sponsored by Senators Hatch, Inouye, and Hecht, called for \$118 million being allowed for development incentive grants to states which adopt tort reforms or new proposals. Such tort reforms should include periodic payments for awards above \$100,000 in liability cases; elimination of the collateral source rule; a limitation on pain and suffering and punitive damages to \$250,000; and sliding scale attorney fees based on the amount of the jury award. The companion bill in the House, H.R. 1955, is sponsored by Representative Norman Lent (R-NY).

Kentucky's own Senator McConnell has reintroduced his liability bill, with some modifications. S. 554 would limit joint and several liability clauses, reinstitute a fault-based standard of care, require higher evidentiary standards for punitive damages, provide for attorney sanctions for instituting frivolous suits, modify the collateral source rule, and promote alternative dispute resolution.

The federation has also been involved in discussions of catastrophic medical insurance. A consensus appears to be forming among the principal proponents of catastrophic health insurance. So far, catastrophic coverage has only been given serious attention as it applies to Medicare beneficiaries. Senator Lloyd Bentsen of Texas has introduced S. 1127, which would provide for catastrophic coverage to any Medicare patient whose out-of-pocket expenses for Medicare in any one year were \$1,700, indexed for inflation. This coverage would be financed by a \$4 increase in the Part B premium. Individuals with higher incomes would pay a supplemental premium based on income.

This bill is similar to other legislation favored by physician organizations, the Stark-Gradison House bills H.R. 1280 and 1281. Like the Bentsen bill, these proposals would provide catastrophic coverage when out-of-pocket expenses had reached \$1,700. They would be funded by an increase of Part B premiums, also based on income, with persons having an income over \$20,000 a year paying a monthly premium of \$44.

Of probably greatest concern to individual physicians has been changes in the Medicare law. Predominant among these concerns have been determination of maximum allowable actual charges (MAAC) and proposals to pay physicians on a diagnosis related group (DRG) basis.

As of July 15, the AMA-authored House Concurrent Resolution 30 had 322 cosponsors. The companion Resolution in the Senate, S.R. 315, had 45 cosponsors. These Resolutions call for Congress to express its intent not to



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pay physicians on the basis of DRGs. The strategy behind support of these Resolutions was to prevent a DRG-based payment system being included in the Budget Reconciliation Act. The last three fiscal-year budget proposals included Medicare Program changes that affected physicians, but not as line item issues. The Administration has used the tactic of obfuscating changes of this nature in the overall budget proposal so that the Congress cannot vote on specific matters, but has the opportunity only to vote in the affirmative or negative for the overall budget package. The AMA hopes that with the number of sponsors acquired for these Resolutions, this tactic will be stalled. As of this writing, both Kentucky Senators and five Kentucky Congressmen have signed as cosponsors.

Although DRG payments to all physicians have been conclusively addressed, the Administration seeks to single out radiologists, anesthesiologists, and pathologists for such payments because they are hospital-based, and reimbursement to them through hospital payments is seen as convenient. It is hoped that the Resolutions will stand in lieu of this Administration alternative.

On a related matter, it is interesting to note that Congress asked for a report from HCFA in 1983 concerning the feasibility of reimbursing physicians based on DRGs, the report to be finished by 1985. According to the AMA, a portion of the report, which remains unpublished, states that DRG-based payments to physicians are inadvisable, would be difficult to put into place, complex to administer, and the impact on the overall program is not predictable.

The other significant provision physicians have been faced with, the MAAC issue, has also received a good deal of scrutiny and related activity by the federation. In June this year the AMA began a campaign to amend the portion of the Medicare law that calls for MAAC calculations and payments. Much like the House and Senate Concurrent Resolutions, the AMA is seeking cosponsors of this amendment, along with 33 national specialty groups. In summary, the amendment calls for using a more recent base period for determining charges and allowing physicians more flexibility in making calculations due to the inadequate information supplied by carriers.

The amendment is being initiated for discussion in the Senate Finance Committee and the House Ways and Means Committee, which have Medicare jurisdiction. During the month of June, medical associations with Congressmen on either Committee conducted intensified contacts to gain support for the amendment.

A successful Congressional visitation and banquet was conducted this year in June, and KMA representatives reaffirmed positions on a number of issues with the Kentucky Congressional delegation. Primarily, concerns relating to

the Medicare Program were expressed on the basis of quality-of-care issues. Such matters are partisan issues, but affect all Kentuckians, and a favorable impression was received from our representatives.

Every year it seems as if various national proposals seeking to restrict physician activities are generated in new and increasing variety. Every battle against these threats is not won, but Medicine remains a strong political adversary and an effective advocate for physicians. Thanks is due to all physicians who have aided in Kentucky's legislative efforts, and particularly to the Key Contacts.

**Fred C. Rainey, MD**  
**Chairman**

### **Report of the Committee on State Legislative Activities**

Four Resolutions adopted by the 1986 KMA House of Delegates were referred by the KMA Board of Trustees to the Committee on State Legislative Activities for recommendation or review.

#### **Resolution Y - Seatbelt Legislation**

RESOLVED, that the KMA set as a priority the passage of mandatory seatbelt legislation in the next Kentucky General Assembly.

During the 1986 Kentucky General Assembly (KGA) the Kentucky Medical Association strongly supported mandatory seatbelt legislation. As many of you recall, US automakers were the primary legislative and financial supporters of mandated seatbelt usage. Faced with federal legislation which mandated seatbelt usage or airbags, automakers opted to fund State legislation requiring motorists to wear seatbelts. Two major forces in the 1986 KGA combined to defeat the bill. Conservatives opposed to any form of government intervention in their private lives bitterly opposed the legislation.

Others resented the fact that cost, not human safety, appeared to be the motivating factor for mandated seatbelt usage. In the end, a parliamentary maneuver by Senate opposition combined to seal the fate of the bill. These facts are presented to inform KMA members of the difficulties we face. KMA will strongly support passage of this legislation, recognizing that tort reform measures, the focal point of KMA's efforts, will be extremely time consuming.

#### **Resolution W Office of the Commissioner of Insurance**

RESOLVED, that the Kentucky Medical Association work with the Commissioner of Insurance, the Legislature, and

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the Executive Branch of the Government to strengthen the State's ability to manage regulation, coordination, oversight, data acquisition, and management responsibilities through enhancement or resources for the Commissioner's office, if indicated, and legislation as may be required to strengthen the State's capacity to regulate, coordinate, and maintain adequate accessible information for policy formulation and oversight purposes.

Numerous hearings have been held in Frankfort criticizing the inadequacies of the Kentucky Department of Insurance. Funding is the major obstacle to most reform which could provide additional personnel and administrative costs. The KGA Task Force on Liability Insurance has focused its attention on the Office of the Commissioner of Insurance and legislation is expected to be recommended, which would provide additional staff and more oversight of insurance company practices.

## Resolution CC

### Effects of Liability on Vaccine Availability

RESOLVED, that members of the Kentucky General Assembly be advised, in a timely fashion, of the situation of the high cost and potential unavailability of DPT vaccine, and urged to provide appropriate legislative relief.

Modification of the Kentucky Constitution is the centerpiece of KMA's proposals for tort reform. A letter was mailed to every member of the KGA outlining KMA's proposals and information regarding the reduction in costs of DPT vaccine in North Carolina following legislation which limited manufacturers' product liability exposure. Lederle laboratories eliminated the product liability portion of its price for DPT in North Carolina and, as a result, a 15-dose vial of its childhood DPT vaccine dropped from \$133.75 to \$55.00, or from \$8.92 per dose to \$3.67 per dose. According to Mr. Gary Higginbotham, US Public Health Service Officer assigned to the Kentucky Cabinet for Human Resources (CHR), the cost of DPT for private physicians, in Kentucky, is \$133.75 per 15-dose vial or \$8.92 per dose. Mr. Higginbotham noted that CHR, which purchases vaccine in large quantities, pays \$7.69 per dose of DPT for use in Kentucky Health Department clinics and other locations where immunizations are provided. We believe this information provides strong support for liability reform and will be a factor in our effort to achieve tort reform.

## Resolution D - Alternatives to Malpractice Insurance

RESOLVED, that the KMA explore the feasibility and risks to the physicians and the medical staff of possible alternatives to malpractice insurance (such as escrow ac-

counts or surety bonds) as a requirement of medical staff membership.

Carl L. Wedekind, Jr, President of Kentucky Medical Insurance Company (KMIC), has developed a proposal modeled after the original Workman's Compensation Plan which provides an option to the present tort system. Mr. Wedekind's report, which has been presented to several KMA committees and printed in the *Journal of the KMA*, is an option worth pursuing as an alternative to the present system. The Legislative Committee will continue studying other alternatives, but due to Constitutional restraints, the outlook is not promising.

The interim period of the KGA has studied several issues of direct concern to physicians. The Worker's Compensation Program in Kentucky has been the focal point of attention. Presently the fund is \$1.6 billion in debt and expands \$2 million per week. A task force established to study the problem has delivered its report to the Governor. Central to the dilemma are rising health care costs. According to the study, in 1980 health costs represented 18% of the benefit dollar. In 1986 this figure has mushroomed to 40% of the benefit dollar. The task force has attempted to reduce health care costs by adopting several recommendations.

Section 5. KRS 342.035 is amended to read as follows:

(1) Within one hundred eighty (180) days following the effective date of this Act, the board shall promulgate administrative regulations to adopt a schedule of fees and duration of treatment for the purpose of ensuring that all fees and charges under KRS 342.020 shall be fair and reasonable [shall be subject to regulation by the board] and shall be limited to such charges as are reasonable for similar treatment of injured persons of a like standard of living in the same community and where such treatment is paid for by the injured person himself. In determining what fees are reasonable, the board may also consider the increased security of payment afforded by this chapter.

(2) The employee, employer, self-insured employer or carrier shall not be liable for the payment of fees or charges in excess of those authorized pursuant to this section.

(NOTE: The prior information is set forth in legislative amendment format with the new proposal being underscored and the language deleted set off by brackets and accented by diagonals through the wording.)

In essence, if the present proposal is adopted, the Workers' Compensation Board would be required to adopt a fee schedule, whereas in the past most fees were reimbursed



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as submitted. In addition, balanced billing will be prohibited.

KMA has officially objected to the proposed fee schedule as being arbitrary. However, mindful of the severe problem the State has, the KMA has recommended that the Worker's Compensation Board consider utilizing the KMA Claims and Utilization Review Committee to review questionable claims or fees exceeding the usual, reasonable, and customary charges.

Section 22. KRS 342.255 is amended to read as follows:

- (2) **In a claim for benefits, no party may introduce direct testimony from more than three (3) physicians without prior consent from the board. The motion requesting additional testimony shall clearly demonstrate the need for such additional testimony. A party may introduce direct testimony from a treating or non-treating physician through a written medical report. Such report shall become a part of the evidentiary record, subject to the right of an adverse party to object to the admissibility of such report and to cross-examine the reporting physician. The board shall promulgate administrative regulations prescribing the format and content of written medical reports.**

According to the study, in some cases as many as 18 separate physician consultants were utilized in single Workers' Compensation cases.

The recommendation provides for exceptions. Overutilization of consultants appears to be a problem brought on by attorneys, not by physicians.

The second major issue of the interim period was the liability crisis. In 1986 the KGA adopted a 1985 KMA House of Delegates recommendation that a task force study the liability problem in Kentucky. Richard F. Hench, MD, President of KMA, is a member of the task force. The task force, as of this writing, has not developed a final report. Chairman of the Board, Nelson B. Rue, MD; President of the Jefferson County Medical Society and Chairman of the Kentucky OB-GYN Society KOGS - Kentucky Section of ACOG, Larry P. Griffin, MD; and Gregory Cooper, MD, of Cynthiana, presented testimony to the task force. In addition, KMA was the catalyst in establishing the Tort Reform Association of Kentucky (TRAK), an organization of business and industry seeking liability relief. This report will not elaborate on the liability campaign which is directed by the Ad Hoc Committee on Professional Liability Insurance. A full and separate report has been submitted by the Ad Hoc Committee on Professional Liability Insurance.

Third, the study of indigent care continues, as it has for several interim periods. In 1986 the KMA Board of Trust-

ees established an Ad Hoc Committee on Indigent Medical Care, and a report has been submitted to the House. Due to the severe shortfall of State funds, we are not optimistic that this problem will be seriously addressed in 1988. In the words of a major player in the KGA, "If it costs money, forget it."

Another area of interest to the Interim Health and Welfare Committee is the growing AIDS epidemic. Members of the KGA are receiving constituent pressure to adopt legislation—any legislation. Unfortunately, several proposals, including incarceration, overutilization of testing, etc., are being considered. The KGA ordinarily reacts to public concerns by adopting legislation which meets public favor and gives the appearance of addressing the problem. The Association will become actively involved in the medical and patient facets of the AIDS problem, being cautious to separate the medical from the social aspects.

Other areas of interest include continual encroachment of nonphysician groups into that area normally reserved for physicians. We particularly see these inroads by nonphysician licensure boards. For instance, both the Physical Therapy Board and the Nursing Board have adopted or proposed regulations ordinarily requiring legislative approval. These regulatory tactics have increased as a direct result of House Bill 310, enacted by the KGA in 1986. Essentially, HB 310 requires all governmental agencies to present their regulations to the following KGA for approval. Besides creating an enormous mountain of legislation, the law appears to permit regulatory bodies greater latitude than they enjoyed in the past.

Other health legislation of interest in 1988 includes: Living Will; limits on deposition fees; mandatory health insurance coverage for nonphysician practitioners' services; strengthening drunken driving legislation; safety requirements for all-terrain vehicles; and open access to medical records. We urge physicians to be acutely aware of the potential pitfalls of supporting licensure of nonphysician practitioners. Traditionally, this activity has led to rising medical costs and intensified efforts to practice medicine via legislative fiat rather than through education (ie, optometry, physical therapy, etc).

A major concern of KMA, and one which should receive attention from every physician in Kentucky, is the probable introduction of mandatory participation in Medicare/Medicaid. Mandatory participation legislation, first adopted in Massachusetts, has been introduced in 15 states and adopted in some form by three states. We expect strong support for the adoption of this legislation to come from welfare, consumer, retired groups, and labor unions. It is vitally important that every physician in Kentucky understand the enormous implications which can result from this legisla-

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tion. A word to the wise—a timely visit to your legislators now may mean the difference in the legislators' position in January.

Living Will legislation has been introduced in the KGA since the 1970s. The KMA has followed Living Will proposals very closely, mindful of potential implications to the medical practice. We have been successful in amending every proposal introduced so far to meet medical objections. However, even though approximately 36 states have enacted Living Will legislation, it has not been overwhelmingly received in Kentucky. The Committee on State Legislative Activities, recognizing that Living Wills can be important documents in the relationship between the patient, the family, and the physician, recommends that the KMA endorse the concept of the Living Will and provide testimony and support for passage of the legislation, if introduced, in 1988.

The Committee also discussed the growing crisis of injuries due to all-terrain vehicles. The American Medical Association (AMA) has adopted a report highly critical of these vehicles and state laws which permit the purchase and operation of these vehicles by minors. The Committee on State Legislative Activities recommends that KMA prepare legislation, for introduction in the 1988 KGA, regulating all-terrain vehicles to sharply reduce the risk of injuries and deaths caused by the misuse of these vehicles. The legislation should be based on an AMA-modeled bill.

We have seen a sharp rise in legislative and regulatory proposals permitting nonphysician providers permission to diagnose, prescribe, and treat patients. The Commonwealth of Kentucky budgets millions of dollars to operate two medical schools. We believe that the focus for diagnosing illnesses, prescribing medication, and defining treatment remain the prerogative of the physician, based upon education and training. The Committee on State Legislative Activities reaffirms and recommends to the KMA House of Delegates that KMA continue to oppose further inroads into medical practice by nonphysician groups attempting to circumvent educational and training requirements, via legislative fiat. Those areas are properly within the realm of medical practice and the function of physicians. If quality of medical care is to be maintained, defeat of future proposals is critical.

The Committee will meet again in November and has plans to convene in Frankfort during the Kentucky General Assembly. The legislative Key Contact system will be utilized again during the KGA and is the key component in our legislative effort. On January 6, 1988, KMA will conduct a Key Contact Seminar in Frankfort.

The Committee on State Legislative Activities reaffirms to the House of Delegates the following legislative policies:

(1) All state legislative proposals be coordinated by and channeled through the Committee on State Legislative Activities; (2) The composition, authority, and function of the Quick Action Committee be retained; (3) The composition, priority, manner, and time of introduction of state legislative proposals be left to the discretion of the Chairman of the Committee on State Legislative Activities and the Quick Action Committee. The above policies are not new; rather, they are the ones under which we are currently operating. However, they are felt to be extremely important, and I would be pleased to appear before any committee or group to further discuss them, if desired.

It should be pointed out that while our staff is in Frankfort for the Kentucky General Assembly, they are responsible only to their immediate superiors and not to individual members of the Association. Any complaint relative to the state legislative program or its operation should be directed to the State Legislative Committee Chairman and not to staff. KMA's staff and legislative representatives have been instructed not to carry out any recommendations or suggestions presented to them by anyone without first seeking the approval of this Committee or its proper representatives.

The purpose of this report is to inform members of KMA's efforts in the legislative arena. Without your help KMA's success in the KGA may be limited. We urge every member to call upon their Representative and State Senator and seek support for KMA's legislative positions. We sincerely appreciate the support KMA membership has for the legislative program. In 1988 we will need even more of your time and your efforts. The 1988 KGA will be a crucial time for all of us.

On behalf of the Committee we would appreciate the membership's understanding of the difficult tasks before us. We will strive to do our best in representing KMA and to maintain the trust you have placed in us.

**Wally O. Montgomery, MD**  
**Chairman**

### RECOMMENDATIONS:

1. The Committee on State Legislative Activities recommends endorsement of the concept of the Living Will and support of legislation, if introduced.
2. The Committee on State Legislative Activities recommends that KMA prepare legislation, for introduction in the 1988 KGA, regulating all-terrain vehicles to sharply reduce the risk of injuries and deaths caused by the misuse of these vehicles.



### Report of the Committee on Impaired Physicians

The Committee on Impaired Physicians continued to meet every other month this year as the full Committee. In addition, individual members and groups of members of the Committee met on an ad hoc basis through the year to deal with individual cases. Also during this year, a Program Subcommittee was formed to consider policy issues relating to the Committee's work, as well as to look at long-range administrative requirements for the group's efforts.

A trend among other state medical associations has been to employ a full- or part-time medical director and full- or part-time ancillary staff to operate their programs. Obviously, the existence of such activities is contingent on availability of financing, and the Committee's investigation of these efforts revealed that such funding has been acquired by a variety of means ranging from a dues assessment to external funding from pharmaceutical companies. The Program Subcommittee considered this issue and concluded that Kentucky's program did not warrant such personnel at this time.

Even though Kentucky is as active as any state medical association, all efforts have been made on a voluntary basis by members. While this calls for significant effort and motivation of individual members, the Committee is convinced that the volunteer work is most effective. At some point it might be appropriate for Kentucky to have a full-time program director and staff, but a need is not seen in the immediate future.

The Committee continues to see its role as a benevolent and fraternal group whose sole interest is in aiding our fellows in identifying, treating, and coping with the disease of substance abuse and other impairments. Another trend developing in other states has been so-called "model" legislation, which usually incorporates impaired physician activities under the state licensing act. In the Kentucky situation, the Committee feels this is inappropriate. Technically speaking, the Licensure Board is a police agency of State government which has as its primary objective the protection of the public through assurance of the competence of medical practitioners. Obviously, the Committee shares the concern of protection of the public, but has an equal concern of care for the impaired individual. The Committee's appropriate basis of functioning is from a private, voluntary standpoint.

At the same time, it is gratifying to report that the Committee enjoys an effective working relationship with the Board of Medical Licensure. The Licensure Board has taken the position that physicians it identifies who have problems and who are sincere in seeking help for those problems

should appropriately be referred to the Impaired Physicians Committee. This is not an abrogation of the Board's responsibilities, but an appropriate referral. In such situations, the Committee is able to serve as a recovering physician's advocate both in licensure and other matters, and this arrangement has been effective. The Committee has routine liaison with the Licensure Board on such matters.

The committee is also pleased to have an effective liaison with the Auxiliary through the position of an Auxiliary member who sits with the Committee. A vital communications channel has been established through the Auxiliary representative, and necessary dialogue is maintained with the spouses and families of impaired physicians which might not otherwise exist. This dialogue has been most important in enhancing the recovery process, as well as in identifying problems initially.

The Committee also maintains liaisons with both medical schools and has had some influence in the promotion of educational opportunities within the schools to acquaint students in various stages of training with substance abuse and related problems.

This year the Committee was pleased to meet with David Dodd, MD, who is Medical Director of the Impaired Physicians Program with the Tennessee Medical Association. Doctor Dodd was kind enough to travel to Louisville for a meeting, and the exchange of ideas was helpful, as was the establishment of a liaison which can be of assistance in the future.

Two Committee members attended a conference sponsored by the AMA on physician impairment, which dealt with organizational models appropriate to dealing with impaired physicians, as well as how to work with individuals so impaired. In their report back to the Committee, these members noted that, by comparison, Kentucky's Committee appears to be at least as effective as most, although several new ideas were discovered in handling various aspects of the program which may prove useful.

As coordinator of the KMA Benevolent Fund, the Committee again solicited monies this year. After two years' solicitation, the Fund total exceeds \$20,000. Two requests were considered this year, although only one was felt to be appropriate. With the approval of the Board of Trustees, financial assistance was made in the form of a loan, which will be recouped. The individual making the other request was referred to another source of financial assistance.

So many new activities were initiated this year, processes modified, and efforts expanded, that it would not be appropriate to report them here. However, the Committee would urge any individual with questions or comments to contact the Committee, and the Committee encourages

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members to stop at the booth during the Annual Meeting to talk with Committee members, who will be available. The Committee's efforts this year were, as always, aided by individual KMA members and approved by the Board of Trustees with the Committee's appreciation. A great deal of appreciation is due to the Committee members who have contributed so much.

**David L. Stewart, MD**  
Chairman

### **Report of the Committee on Care for the Elderly**

The Committee on Care for the Elderly met this year and continued many of its efforts from last year. Predominant among these was the development of a series of articles in the *KMA Journal*. These have appeared every other month under the heading "Clinical Notes on Aging." Hopefully, these articles have been helpful to all physicians who provide primary care to elderly patients. They are not intended as detailed scientific articles, but as helpful suggestions in routine geriatric care. The Committee intends to continue publication of these articles, with the approval of the Editors, and would solicit any comments or suggestions for future articles from any interested member.

This year the Committee began working with a representative of the Governor's Office in the area of elderly abuse. The State has presented a number of seminars on this issue during the year to interested groups and has sufficient trained personnel to respond to any request for further seminars on this subject. These have been particularly helpful because they provide information concerning identification of abuse, as well as reporting procedures. In conjunction with the representative of the Governor's Office, the Committee is in the process of developing a brochure to be used by physicians, which provides information from a medical standpoint.

Another area of Committee activity that, hopefully, will further develop has been liaison with the Kentucky Chapter of the American Association of Retired Persons (AARP). In January the Committee met with one of the Assistant State Directors for the AARP, Al Frye, and his wife. The purpose of the meeting was to establish a dialogue with the organization and to try to provide medical input for any concerns its members might have. At the meeting Mr. Frye indicated that the current major concerns of AARP members, as determined by a poll, are:

- the difference between the Medicare allowance and the charge to the patient;
- the small percentage of physicians who accept Medicare assignment;

- the difficulty of understanding hospital billings; and
- the continuing escalation of out-of-pocket medical costs.

He noted that in the poll, it was learned that the members he represented spend approximately 40% of their liquid income on medication.

The Committee acknowledged that it could provide some helpful information on these issues and offered to develop articles or provide speakers for local AARP chapter meetings. Mr. Frye acknowledged that the organization was constituted by region and furnished the Committee with the name of the Regional Health Director for the Kentucky area. This individual was contacted and the same offers for assistance were made. The Committee looks forward to further contact with this group.

The Kentucky Association of Health Care Facilities has developed an Advisory Council composed of interested providers and other members from the private, public and legislative sectors. The purpose of this Council is to consider various issues affecting nursing homes and try to develop a consensus on them. The Chairman of the KMA Committee serves on this Council and has enjoyed input into its deliberations. The Council also serves as a forum for learning about the views of others relating to issues dealing with the care of the elderly.

As Chairman, I would like to thank the Committee members for their help and efforts this year and look forward to continued activities next year.

**John C. Wright, II, MD**  
Chairman

### **END OF CONSENT CALENDAR ITEMS**

#### **Resolution K Jefferson County Medical Society Seat Belt Safety**

WHEREAS, motor vehicle lap-shoulder belts, which have been standard equipment on passenger vehicles since the 1968 model year, when worn by front seat occupants have proven their overall injury-reducing effectiveness, and

WHEREAS, lap-belt use by rear occupants has been demonstrated to be generally beneficial both to front and rear occupants, and

WHEREAS, improved benefits are expected to accrue to lap-shoulder belt systems in outboard positions of the rear seat, now therefore be it

RESOLVED, that the Kentucky Medical Association reaffirm its support for mandatory use of lap-shoulder belt systems in Kentucky motor vehicles, and be it further



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RESOLVED, that the Kentucky Medical Association endorse the position of the American Association for Automotive Medicine, taken October 7, 1986, strongly urging the early and widespread adoption of lap-shoulder belt systems as standard equipment in rear outboard seating positions, and be it further

RESOLVED, that KMA consider associated legislative activities.

### Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed Resolution K, Seat Belt Safety, introduced by the Jefferson County Medical Society, and recommends it be adopted.

#### Resolution L Resident Physician Section Access to Tobacco by Children

WHEREAS, the American Medical Association has adopted a position calling for the banning of all tobacco advertising, much of which is directed at young people, and

WHEREAS, according to the Kentucky Legislative Research Commission, Kentucky law does *not* prohibit access to tobacco and tobacco products by anyone, including children, now therefore be it

RESOLVED, that the Kentucky Medical Association support the concept of legislation prohibiting the sale and distribution of tobacco and tobacco products to individuals under 16 years of age.

### Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed Resolution L, Access to Tobacco by Children, introduced by the Resident Physicians Section, and recommends it be adopted.

#### Report of the Ad Hoc Committee on Professional Liability Insurance

One year ago the House of Delegates delivered a mandate. Members of the House voted unanimously to designate tort reform as the current number one priority of the Association. A plan was developed, public relations (PR) firms were hired, and implementation began. Details of that plan and timetables follow.

#### Individual Physician Involvement—A Necessity

However, permit me to be candid and address what must be done if we are to succeed. This campaign **IS NOT** some

abstract KMA program. This campaign **IS NOT** a campaign in which the major responsibility belongs to KMA and county society officers and staff. The campaign's success or failure **IS NOT** one which relies upon the local Key Physician Contact.

What this campaign is, and what this campaign relies upon, is the physician. **YOU!** This campaign is essentially a four-point legislative program that requires physicians to obtain support from members of the Kentucky General Assembly by doing the following:

- (1) Physicians must convince physicians that their involvement is key to the success of this endeavor. Every physician in every specialty and every region of Kentucky must urge their patients to contact their legislators and convince them that their constituency is affected by the liability crisis. Physicians must be sure they understand our game plan and follow it. Our message to patients and legislators must be unified.
- (2) Physicians must convince patients and the public that professional liability insurance is not "just the cost of doing business," but is passed through to the patient and has the potential to reduce quality and delivery of medical care.
- (3) Physicians must convince fellow business people that rising medical malpractice insurance premiums create havoc with health insurance premiums, which ultimately reflect rising costs. In addition, medical care, a foundation of a small community's ability to attract new industry, could be seriously eroded.
- (4) Physicians must convince the members of the Kentucky General Assembly (KGA) that a system which permits 62 cents of the dollar to be skimmed off the top by trial attorneys, witnesses, the courts, and insurance administrative costs and returns a paltry 38 cents to the injured patient is unconscionable and not in the best interest of their constituents.

"Physicians Must" is the key phrase. The success or failure of this campaign depends on **YOU** and your fellow physician. How you react to the crisis and how much **YOU** participate in the political process of educating people will dictate **YOUR** fate.

This is not a "one-shot deal" with your legislator. It will require you to develop a personal relationship, many of you for the first time, with your legislator. It may surprise you to know that legislators really care and would rather hear from you personally than through KMA. You need to convince your Senator and Representative that their constituents are the real losers in this crisis and are the people who pay for a legal system gone amuck. Frankly, the legislator could care less what you and I pay for our

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premiums. However, they will be interested in knowing that in some instances, 25% of their doctor bill goes to pay for malpractice insurance. They may also be interested in knowing that every woman, man, and child pays a minimum of \$65 per year for defensive medicine costs alone.

Unless your legislator receives calls, personal contacts, and follow-up notes, they automatically assume there is no problem. Finally, if you wait until January 1988 to meet with them, you've waited too long. The Trial Bar representatives have probably already been there.

### House of Delegates Directives

As stated previously, the 1986 KMA House of Delegates designated tort reform as the current number one priority of the Kentucky Medical Association. The House adopted, for regular active members, a \$100 dues increase dedicated to the liability campaign. The goal of the Association is to obtain Kentucky General Assembly (KGA) support and adoption of the following legislative proposals:

- (1) Amend the Kentucky Constitution to permit the KGA to limit awards for noneconomic damages.
- (2) Modify the Collateral Source Rule.
- (3) Permit periodic payments.
- (4) Reduce the statute of limitations for minors.

### 1986 KGA Action

KMA's legislative proposals were introduced during the 1986 KGA. The constitutional amendment was adopted by the Senate; however, House leadership refused to permit a hearing for the bill. Previously, the Senate Banking and Insurance Committee had declined consideration of the reduced statute of limitations for minors. The Committee Chairman indicated to KMA's representatives that until the reduced statute of limitations provision was deleted from the bill, the Committee would not consider the collateral source rule and periodic payment provisions of the bill. Despite heavy opposition, the remaining portions of the bill cleared the Committee. Subsequently, the Senate Democratic Caucus, without warning, voted to recommit the bill to the Judiciary Civil Committee where it died without further hearings. This recap is provided to remind members of the events that took place then, and to give you an example of the political process. We expect the same opposition in 1988.

### Implementation of the PLI Campaign

Following the 1986 Annual Meeting, KMA officers and staff began planning to implement the Professional Liability Insurance (PLI) Campaign. We reviewed the portfolios of

PR firms and utilized a general PR consultant to pare the list to major contenders. Following extensive study, review of references, and personal interviews, the Committee selected not one, but two firms. The PR firm selected to direct our overall effort to achieve public support for tort reform was the Wenz-Neely Company of Louisville. Wenz-Neely has an excellent reputation and is the recipient of numerous awards on both the state and national scenes. During the last election Wenz-Neely conducted a successful Constitutional Amendment Campaign in which Kentuckians voted to permit mayoral succession in large cities.

Recognizing that tort reform requires both public and political support, the Committee decided to contract with The Preston Group from Lexington. The Preston Group is recognized as one of the outstanding political PR firms in the United States. Wenz-Neely and The Preston Group have worked together on many projects and complement each other's efforts.

Thus we entered 1987 with a contract with two excellent PR firms. Both firms were candid from the beginning, reminding us that proposals for reform would not come easy and that KMA should prepare for the long haul.

In accordance with the plan, a member of the KMA staff was assigned the overall internal responsibility of coordinating the campaign and carrying out the directives of the House of Delegates and Executive Committee of the Ad Hoc Committee on PLI. These responsibilities included coordinating the activities of the PR firms, KGA, KMA Board of Trustees, professional liability insurance companies, KMA staff activities related to PLI, membership requests, and working with the general public. In addition, the Director of Legislative Activities devoted tremendous portions of time to the PLI program, concentrating upon the formation of the Tort Reform Association of Kentucky (TRAK). TRAK is a coalition of organizations with the common goal of achieving legislative reform of liability laws. KMA staff met on a weekly basis, updating PLI activities and planning new programs to implement the campaign. KMA maintained daily communication with the PR firms and met with them at least twice monthly.

Many states have conducted successful PLI campaigns, and we thought it appropriate to learn from them. A letter was written to every state medical and national specialty society requesting copies of campaign materials. Response was overwhelming. Over 40 states and specialty societies provided us with brochures, packets, slide shows, VCR tapes, and various other information on their PLI campaigns. Materials were then forwarded to the PR firms for study. AMA was extremely helpful in providing national data and background material and providing some very timely advice.



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### Surveys

The KMA PLI campaign focuses upon three audiences: the physician, the legislator, and the patient-citizen. Early in the campaign the PR companies recommended that we conduct surveys to determine physician and patient attitudes. In 1985 KMA conducted a membership survey regarding the liability crisis. We followed that questionnaire in 1987 with a survey of OB-GYNs and family physicians who maintain, or previously maintained, an obstetrical practice. Our survey findings were reported in the *Journal of the KMA*. On Sunday, April 26, 1987, the *Courier-Journal* devoted the upper half of the front page to the obstetrical liability problem, emphasizing the effect it is having upon rural areas. Press releases went out to every newspaper, radio station, and TV station in Kentucky. We received excellent statewide coverage. A copy of the *Courier* article was mailed to every member of KMA.

According to the KMA obstetrical survey, an alarming number of Kentucky physicians have dropped, or sharply curtailed, their obstetrical practice in recent years.

Half of those who have given up obstetrics did so in the past three years, with the trend line moving upward each year. The number rose from nine in 1980 to 26 in 1986.

The survey of 330 physicians specializing in both family practice and obstetrics/gynecology who had practiced obstetrics within the past eight years revealed that 36% had quit obstetrics in 1986, and another 19% had reduced their practice.

The decline was greatest among family practitioners, where three of five family practitioners left obstetrics by 1986, and another one of five had cut back.

An analysis of the survey by Gordon Scott Bonham, PhD, of the University of Louisville's Urban Studies Center, concluded that liability insurance problems were reported by 70% of the physicians as the reason for quitting obstetrics.

Bonham's report predicted that the decline in obstetrics practice isn't over and that a future shortage of physicians who care for pregnant women is probable.

"One out of eight physicians practicing obstetrics in 1986 said they might discontinue this part of their practice in the near future," he wrote. "This was especially true of those who had already reduced their obstetrics practice, where over half (57%) said they had definite plans to end their practice in the immediate future and one-eighth said they were considering such a measure."

The survey showed that liability insurance is a major expense for physicians, with the amount of coverage carried directly related to current obstetrical practices. Most physicians carry at least \$1 million in coverage, with some

reporting coverage of up to \$10 million. Coverage at \$3 million or more was carried by 30% of physicians currently practicing obstetrics, compared to only 13% of those who had quit obstetrics by 1986.

The survey showed that midwest Kentucky had relied heavily on family practitioners in the past, but with family practitioners leaving obstetrics, only one in five physicians in that region will practice obstetrics in a few years.

The sharpest decline in obstetrics practice occurred in the northeastern part of the state where 42% of those surveyed said they had eliminated their practices. Close behind was the midwest section of Kentucky where 39% reported they had left obstetrics.

(The northeast region includes the 42 Kentucky counties that make up the Bluegrass, Gateway, Fivco, and Buffalo Trace Area Development Districts. The midwest region includes the 39 counties that are in the Barren River, Lake Cumberland and Lincoln Trail Area Development Districts.)

Among all Kentucky physicians who are sued, about one-fourth of the lawsuits resulted in a settlement to the patient, one-third resulted in acquittal of the physicians or dismissal of the case, a few were dropped by the plaintiff, and the remainder were unresolved.

During 1986, the Kentucky Medical Association had 648 members who listed family practice as their specialty and 295 who specialized in obstetrics/gynecology. It is important to note that this survey was completed prior to the increase in premiums levied in April by KMIC.

The second survey was conducted by Hamilton, Frederick and Schneiders of Washington, DC, one of the nation's foremost public pollsters. Their findings, gathered from a survey of 600 Kentuckians, indicate strong support for tort reform in Kentucky. Kentuckians' views appear to reflect national surveys conducted by AMA on the tort reform issue.

The findings were released during a press conference which was conducted by Keith Frederick of Hamilton, Frederick and Schneiders. We received excellent coverage, and articles appeared in many daily and weekly newspapers in Kentucky. The *Courier-Journal* and *Lexington Herald* gave the story prominent placement.

The major objectives of this study were to determine consumer attitudes toward:

- health care delivery costs;
- increases in medical malpractice insurance;
- the legal system, insurance industry, and physicians; and, further, to identify support for reform of liability laws.

Key findings included:

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- Almost 90% of Kentuckians expressed the opinion that health care costs, in recent years, have gone up—nearly 60% feel costs have risen sharply.
- Most consumers are aware of the role malpractice insurance rates play in health care costs. A majority feel that rising insurance costs are a major factor in accelerating health care costs.
- The blame for high insurance rates falls squarely on the shoulders of the legal system, according to a majority of those surveyed. They feel the system encourages needless lawsuits and demands for unreasonable settlements.
- Kentuckians strongly support a wide range of solutions to the medical liability problem, which include: establishing a ceiling on jury awards for noneconomic damages; assuring that a greater percentage of the jury award goes to truly injured claimants rather than to the legal system; providing a vehicle to make out-of-court settlements easier; and enacting legislation to limit medical liability insurance rate increases.
- To further reinforce the situation's urgency, 80% of those surveyed labeled reform as a major priority for the next legislative session.

The survey concluded that Kentuckians view themselves as the consumer group most adversely affected by escalating malpractice rates. They say physicians are the next group most hurt.

According to the poll, the public would support legislative action to solve the problem of rising liability insurance rates as a means to contain health care costs.

### Physician, Public, and Legislative Activities

In addition to generating news stories, the PR firms are developing patient brochures and legislative packets. The brochures, for physicians' offices, outline the problem and urge public support for tort reform. The legislative packet emphasizes KMA's concerns and points to the public's support for legislative relief. Before the KGA convenes, KMA officers, Key Contacts, and staff plan to conduct visitations with key members of the KGA outlining our concerns and seeking support for tort reform. This task will require the support of physicians on the local level. To supplement these efforts, we urge local medical societies and hospital medical staffs to conduct their own legislative programs and invite legislators to these meetings.

In March, the KMA conducted a PLI Seminar in Lexington. To attract a wide array of physicians and specialties, we invited speakers to address various topics, including contracting, alternate delivery systems, and marketing. We also invited the AMA Director of Legislation from Wash-

ington, DC, to update physicians on the national scene. The program focused its attention upon the liability issue, and the content and speakers were outstanding.

During the 1986 KGA a loose-knit coalition of lobbyists from various professions, businesses, and insurance companies combined forces to create interest among legislators to adopt tort reform. A major obstacle to success was a lack of cohesiveness and ability to agree upon specific measures. Recognizing the need for a joint effort, and seizing the momentum already generated during the session, KMA provided seed money, executive staff, and administrative support to form the Tort Reform Association of Kentucky (TRAK). TRAK has approximately 25 charter members, each of whom pay dues of \$1,000. TRAK provided testimony to the Kentucky Insurance and Liability Task Force and to the Kentucky Senate. Other presentations have been made to various chambers of commerce and civic groups throughout Kentucky. TRAK is expected to mount an aggressive lobbying effort in the 1988 Session.

Another major player in tort reform is the Kentucky Insurance and Liability Task Force. The Task Force was formed as a direct result of a KMA proposal that the General Assembly study the professional liability issue. The Task Force has met monthly, and Richard F. Hench, MD, President of KMA, and Carl L. Wedekind, Jr, President of the Kentucky Medical Insurance Company (KMIC), serve as members. The Task Force, at this point, has not submitted its final report, but we have hopes that it will endorse portions of KMA's proposals. KMA Chairman of the Board, Nelson B. Rue, MD, presented testimony to the Task Force and emphasized the four-point proposals of KMA.

A Constitutional Revision Commission was also formed by the KGA, and KMA secured a seat on this important Commission. Several constitutional alterations have been proposed, including the keystone of KMA's package, modification of Section 54 of the Kentucky Constitution. Other measures would reduce the liability risks of cities, government entities, and business groups. As you can see, KMA grasped every opportunity where it was felt the liability issue could be addressed.

In February, KMA developed a 20-30 minute slide show on the KMA PLI campaign. Every Trustee was supplied a copy of the slide show with script. We established a goal to speak with every hospital staff in Kentucky. We hope to receive support from nonmembers through the hospital medical staff meetings. In addition, a PLI presentation was made at every Trustee District meeting, organized county society, and specialty group meeting.

We are in the process of updating the KMA Key Contact System. The brunt of KMA's legislative effort falls upon physicians who serve as legislative contacts. In July, the



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Executive Committee met at the Headquarters Office to phone the 138 Key Contacts. Over 100 calls were made, and we reached 54 Key Contacts. Fifty-one agreed to serve. Key Contacts were briefed on the campaign, and officers stressed the importance of their role. We will continue to contact remaining key physicians. We intend to broaden the KMA legislative base by asking other physicians to serve as volunteers to visit, phone, or write legislators during the Session. Plans are also underway to work with the Auxiliary of the KMA in developing a phone bank.

On January 6, 1988, KMA will conduct a Key Contact Seminar in Frankfort, at the Capital Plaza Hotel. Key contacts, KMA Officers and Trustees, KEMPAC directors, specialty group officers, Auxiliary officials, and other interested physicians will be invited. The program will feature presentations by the leadership of the Kentucky General Assembly and the Legislative Research Commission. The stated purpose of the Seminar is to kick off the PLI legislative campaign and generate physician interest in the KGA and the entire political process.

The Executive Committee of the Ad Hoc Committee on PLI met on eight occasions to receive reports, establish positions, and approve expenditures. We studied various other legislative proposals in addition to the four major points of the KMA plan. The full Committee met on one occasion and reviewed the KMA plan, heard reports from the PR firm, and commented on the proposal of Carl L. Wedekind, Jr, President of KMIC, to establish a patients' compensation system whereby malpractice claims would be settled outside the present tort system. The proposal is modeled after the original Workmen's Compensation laws and merits serious consideration. Similar programs are being offered in Florida and other states. In addition, the Committee accepted a report from the Tort Reform Association of Kentucky (TRAK) and reviewed recommendations proposed by TRAK.

We have increased our contact with the Governor's office. In a private meeting with the Governor, I personally urged Governor Martha Layne Collins to speak out on tort reform and to include liability issues in any call for a Special Session. We have followed up on this visit by encouraging other physicians, when meeting with the Governor, to address this issue. In addition, KMA staff has maintained contact with the gubernatorial staff and provided data and other supporting material. We also wrote an official letter to the Governor recommending that the liability issue be considered in any call for a Special Session.

A meeting of the KMA-KBA Physician-Attorney Liaison Committee has been scheduled for August 27. Both groups have a prior commitment to include tort reform on the agenda. KMA plans to present KMA House of Delegates proposals

to the Committee and seek its reaction. In addition, we plan to discuss other proposals, particularly those included in the TRAK program. Presidents and chief executive officers of the respective organizations have been invited.

Candidates for Governor were invited to speak during the luncheon meeting at our PLI Conference in March. We encourage physicians who are meeting with candidates for the fall election to seek support for KMA's PLI program. Statistics are available to buttress our position that medical malpractice has reached crisis proportions, and KMA will be pleased to provide the supporting data.

KMA officers and staff focused considerable attention upon allied health groups. Most allied health groups are charter members of TRAK and have experienced similar problems. The Allied Health Council, of which KMA is a member, meets frequently and shares information. Representatives from the Kentucky Hospital Association, Kentucky Pharmacists Association, Kentucky Dental Association, and KMA make up the Allied Health Council. We continue to meet on a regular basis with the Kentucky Hospital Association to formulate a joint effort for the upcoming Session.

We have communicated our concerns for the upcoming KGA to the KEMPAC Board of Directors. According to a recent report, physicians give less than \$35 per year to political candidates. However, KEMPAC, the political arm of KMA, provides physicians with an opportunity to support candidates whose philosophies and positions parallel Medicine's. Legislative candidates are well aware of KEMPAC and its reputation. We believe that the KEMPAC Board has done a remarkable job this year in recognizing the medical malpractice crisis and its impact upon the public sector.

### **Membership Involvement**

The overall response of Kentucky physicians to the PLI campaign has been excellent, and KMA membership has increased during the Associational year. In addition, the number of Life Members making voluntary contributions to the campaign has been an example to us all. Several specialty groups have also made substantial monetary contributions to the PLI effort.

As we reach the critical stage of the campaign, individual physician contact with patients and legislators becomes crucial. Every physician in Kentucky should be making an effort to personally contact his/her legislators and impress upon them the severity of the crisis and its implications to medical care. Rural patients are already experiencing accessibility problems as family physicians and OB-GYNs withdraw from obstetrical practice. As medical malpractice rates continue to escalate, emergency medical care will be

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the next group to feel the strain, as it has in Florida where high-risk specialty rates exceed \$205,000. We can expect rates comparable to Florida's in the near future, if relief is not forthcoming.

### **Tort Reform in Kentucky and Other States**

We recognize that tort reform is not the final answer. However, we know that reform can alleviate the rise in premiums and reduce frivolous lawsuits. Kentucky's Constitution, like that in only three other states, is a formidable obstacle. We are acutely aware of that fact because we adopted extensive reform measures during the 1976 Session, only to see the courts rule our package unconstitutional. Sometimes our memory fades. Many physicians point to Indiana as an example for Kentucky. Let me remind you that Kentucky adopted legislation similar to Indiana's, but it was thrown out by the courts one year later.

From 1980 to the present, we have witnessed an upheaval in the malpractice climate. This year is no exception. The number of suits has increased dramatically. Kentucky Medical Insurance Company, the company established by KMA, reported that in 1981 one policyholder in 27 was sued. That number climbed to one in 10 by 1985. The awards continue to grow, too. The average cost per claim against KMIC policyholders jumped from \$14,000 in 1982 to \$101,000 in 1986. KMIC insures about 55% of Kentucky's physicians.

According to St. Paul Insurance Company, which insures 600 physicians in Kentucky, frequency of claims in Kentucky is less than the national average. On the other hand, severity (or the cost of these claims) in Kentucky is about average in relation to the rest of the nation. Both these factors, according to St. Paul, are used in determining the rate for physicians in Kentucky. Since 1986, St. Paul has not written any new business nationwide. However, they are adding physicians to existing accounts.

Those who decry tort reform complain that the injured patient will be the real loser. However, it is interesting to observe where the malpractice insurance premium dollar really goes. The civil justice system's appetite is huge, and not all the dollars churned up in the process find their way to the hands of injured plaintiffs. As you can see by the attached exhibit, only 38 cents of the premium dollar ends up in the patient's pocket. The remaining 62 cents goes to attorneys, expert witnesses, and the court system.

Some individuals and special interest groups argue that we really don't have a problem in Kentucky. The facts indicate otherwise. Insurance rates are increasing at an alarming rate, and will get worse. KMIC reports that between 1980 and 1987 malpractice premiums in Kentucky quadrupled for most specialties.

Tragically, malpractice costs to our medical system are massive and don't even show up in charges to the patient. These hidden costs relate to defensive medicine. The AMA has estimated that defensive medicine adds \$15 billion to \$40 billion to medical care costs annually. If we accept the conservative figure of \$15 billion, that still means that every man, woman, and child pays \$65 per year for defensive medicine costs alone.

We have received tremendous support from KMIC, and the two other major insurance carriers, Medical Protective and St. Paul, have been helpful. When we needed assistance and information to develop testimony or position papers, the carriers responded. We have some concern that the 1988 KGA, in lieu of adopting positive reform measures, may spend the entire session bashing insurance companies. West Virginia, Colorado, New York, Florida, and other states serve as examples of what occurs when legislatures adopt trial attorney and consumer proposals that intervene in insurance company management practices. The companies simply leave the state. St. Paul has already stopped writing new business in Kentucky, and Medical Protective has reduced its upper limits for high-risk specialties. KMIC is essentially "the only game in town" for many physicians. Legislation restricting premium increases, interference in underwriting, and bureaucratic intervention in the day-to-day business of malpractice insurers, will not work and could ultimately lead to higher premiums and a restricted market. Kentucky cannot afford to lose the companies we now have.

The AMA continues to press for legislative relief in Congress. Please refer to the National Legislative Committee Report for particulars relating to AMA's effort. Several members of the PLI Executive Committee participated in the Washington Dinner activities this year and the Kentucky Delegation strongly supported several tort reform measures, including those introduced by Senator Mitch McConnell (R-KY) and Senator Orrin Hatch (R-UT).

### **Committee Recommendations**

At its last meeting, the Ad Hoc Committee on PLI reaffirmed its support for the adoption of the four major liability proposals of the KMA package. In addition, the Executive Committee of the Ad Hoc Committee on PLI recommends that KMA include in its legislative package expert witness legislation. The precise language is to be determined by the KMA in consultation with legal counsel.

The Committee also recommends that KMA endorse TRAK's entire package, which includes the four proposals adopted by the KMA House of Delegates. TRAK recommendations include:



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- (1) Amendment of Section 54 of the Kentucky Constitution to permit the KGA to limit noneconomic damages.
- (2) Mandating offset of payments received from collateral sources.
- (3) Alteration of the statute of limitations as it relates to minors.
- (4) Judicial or legislative imposition of a reasonable fee schedule for attorneys.
- (5) Periodic payments for future damages.
- (6) Punitive damages:
  - a. When assessed, punitive damages should go into a tort victim's relief fund.
  - b. Claims for punitive damages can be included in the complaint only after reasonable grounds have been established through discovery and certified by the court.
- (7) Exploration of alternate mechanisms for dispute resolutions (ie, modified no-fault or Workers' Compensation type legislation).
- (8) Review of provisions in the Constitution which permit judge-made law, exacerbating the liability crisis.
- (9) Joint and several liability proposals.

It is essential that we continue our support and participation in TRAK. While the liability crisis is lessening for businesses and industry, the medical malpractice crisis deepens. TRAK members recognize the uniqueness of the physician malpractice crisis. However, every legislative proposal must be drafted in generic form and apply equally to all. The Kentucky Constitution prohibits "special interest" legislation, a pitfall we encountered in 1976.

### Summary

We are firmly convinced that tort reform is not only necessary, but essential, if accessibility to medical care is provided equally to all Kentuckians. Continuation of the crisis, coupled with rising insurance premiums, will only serve to create two levels of medical care and worsen the indigent care problem. High-risk specialties will simply not be available, and the growing crisis in obstetrical care provides great potential for risks, particularly to the poor and the rural populations.

Resolution of this crisis is not just a concern to physicians, but one which society must equally share. Maintaining the present tort system, which permits outrageous awards and encourages frivolous and unnecessary lawsuits, is not in the public interest.

Implementation of the PLI campaign is on target. The campaign will be in an accelerated mode from now through the 1988 Kentucky General Assembly. More than ever, we

will need the support of every Kentucky physician and a willingness to be involved and act when called upon. With a unified effort, we can hopefully achieve the goals established for this campaign.

**Wally O. Montgomery, MD**  
Chairman

### Recommendations:

1. The Ad Hoc Committee on PLI recommends that KMA include in its legislative package expert witness legislation. The precise language is to be determined by KMA in consultation with legal counsel.
2. The Ad Hoc Committee on PLI recommends that KMA endorse the entire legislative package of the Tort Reform Association of Kentucky (TRAK), which includes:
  - (1) Amendment of Section 54 of the Kentucky Constitution to permit the KGA to limit noneconomic damages.
  - (2) Mandating offset of payments received from collateral sources.
  - (3) Alteration of the statute of limitations as it relates to minors.
  - (4) Judicial or legislative imposition of a reasonable fee schedule for attorneys.
  - (5) Periodic payments for future damages.
  - (6) Punitive damages:
    - a. When assessed, punitive damages should go into a tort victim's relief fund.
    - b. Claims for punitive damages can be included in the complaint only after reasonable grounds have been established through discovery and certified by the court.
  - (7) Exploration of alternate mechanisms for dispute resolutions (ie, modified no-fault or Workers' Compensation type legislation).
  - (8) Review of provisions in the Constitution which permit judge-made law, exacerbating the liability crisis.
  - (9) Joint and several liability proposals.

### Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed the Report of the Chairman, Board of Trustees, Ad Hoc Committee on Professional Liability Insurance Report and its recommendations, **only**, and heard testimony from Wally O. Montgomery, MD, Chairman of the PLI Committee. Doctor Montgomery additionally noted, and the Reference Committee concurs, that an additional consideration of the PLI

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Committee would deal with the protection of personal assets from liability in malpractice judgments.

Reference Committee No. 3 recommends that the Report of the Ad Hoc Committee on PLI be adopted.

### **Resolution D Allen County Medical Society Malpractice Insurance Tail Coverage**

WHEREAS, in a time of malpractice insurance crisis, the Kentucky Medical Association formed the Kentucky Medical Insurance Company to offer equitable, dependable, and fairly priced malpractice insurance to all of the members of KMA, and

WHEREAS, the KMIC is totally controlled by the KMA, as owner of all of the voting class stock of KMIC, and

WHEREAS, the KMIC has served the KMA members well with occurrence type malpractice coverage until recently when, again, a malpractice insurance crisis occurred and caused KMIC to discontinue occurrence coverage and offer only claims made coverage plus tail end coverage, and

WHEREAS, this has caused a hardship on many of the faithful KMA members who have carried KMIC malpractice insurance since its inception, are now nearing retirement, and have been instructed by KMIC that they must be covered by KMIC claims made insurance for five years to have the tail premium waived at death, disability, or retirement from the practice of medicine, now therefore be it

RESOLVED, that the KMA, through its Board of Trustees, instruct the KMIC to implement a program which would retroactively exempt from tail premiums any KMA member who had carried either full-time occurrence or claims made KMIC malpractice coverage for the five years immediately preceding death, disability to practice medicine, or retirement at age 65 or later.

#### **Recommendations, Reference Committee No. 3:**

Reference Committee No. 3 reviewed Resolution D, Malpractice Insurance Tail Coverage, introduced by the Allen County Medical Society. Testimony presented indicates that the action called for by this Resolution has already been put into effect by KMIC. Reference Committee No. 3 therefore recommends that Resolution D be rejected.

### **Resolution E Allen County Medical Society Prorated Malpractice Insurance Coverage**

WHEREAS, in a time of malpractice insurance crisis, the Kentucky Medical Association formed the Kentucky

Medical Insurance Company to offer equitable, dependable, and fairly priced malpractice insurance to all of the members of KMA, and

WHEREAS, the KMIC is totally controlled by the KMA, as owner of all of the voting class stock of KMIC, and

WHEREAS, the KMIC has served the KMA members well with occurrence malpractice coverage until recently when, again, a malpractice insurance crisis occurred and caused KMIC to discontinue occurrence coverage and offer only claims made coverage plus tail end coverage, and

WHEREAS, coverage is made available on a full-time basis as if every physician practiced or was employed full time and no reduced or prorated premiums are available to physicians who practice only part time or are semiretired and wish to maintain malpractice coverage, and

WHEREAS, this has caused an inequity in the cost of malpractice insurance as well as a financial hardship on physicians who work or are employed less than full time, and

WHEREAS, there are other medical malpractice insurance carriers who do write prorated coverage and/or coverage for individuals or groups of part-time practitioners and charge slightly higher premium rates but only charge for time worked or periods of time worked, now therefore be it

RESOLVED, that the KMA, through its Board of Trustees, instruct the KMIC to investigate and consider expanding their types of malpractice insurance coverage to include a prorated coverage program for physicians who work less than 800 hours per calendar year.

#### **Recommendations, Reference Committee No. 3:**

Reference Committee No. 3 reviewed Resolution E, Prorated Malpractice Insurance Coverage, introduced by the Allen County Medical Society, and heard testimony regarding this Resolution.

Reference Committee No. 3 recommends that Resolution E be amended as follows:

**"RESOLVED, that the KMA, through its Board of Trustees, request the KMIC to investigate and consider expanding their types of malpractice insurance coverage to include a prorated coverage program for physicians who work less than full time."**

Reference Committee No. 3 recommends the adoption of Resolution E, as amended.

### **Resolution F Jefferson County Medical Society Patient Compensation Fund**

WHEREAS, a representative of the Kentucky Medical Insurance Company, namely, Carl L. Wedekind, Jr, worked



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long and hard on development of a plan for a compensation fund to eliminate the tort system in cases of medical negligence, and

WHEREAS, the proposed savings to the system are extremely significant with the suggestion that up to two-thirds of the amount of money expended at the present time would be available to reimburse for patient losses, and

WHEREAS, all physicians wish to appropriately compensate injured patients, and

WHEREAS, this proposal would allow for disciplinary action, as well as a financially sound basis for funding these types of problems, and

WHEREAS, should this program be accepted by the State Legislature, a large amount of reserves which have been put aside by insurance carriers in the state of Kentucky under the IBNR category would no longer be required, and

WHEREAS, this program would require funding to begin its work, and

WHEREAS, under the present circumstances, the reserve category for losses incurred but not reported would serve as excess profit to the insurance carrier, now therefore be it

RESOLVED, that the Kentucky Medical Association support implementation of a patient compensation system as proposed by Carl L. Wedekind, Jr, President of the Kentucky Medical Insurance Company, and be it further

RESOLVED, that the KMA study the possible use of funds held in reserve in the "incurred but not reported" category, to establish the patient compensation fund, and be it further

RESOLVED, that the KMA work toward construction of the patient compensation fund so that an appropriate share of all future contributions to "incurred but not reported" reserves will also be forwarded to the fund.

### **Recommendations, Reference Committee No. 3:**

Reference Committee No. 3 reviewed Resolution F, Patient Compensation Fund, introduced by the Jefferson County Medical Society, and heard testimony regarding the use of funds held in reserve.

Reference Committee No. 3 recommends that Resolution F be amended by deleting the last two "RESOLVED" and by deleting from the first "RESOLVED" the words, "and be it further." The amended Resolution would then read as follows:

**"RESOLVED, that the Kentucky Medical Association support implementation of a patient compensation system as proposed by Carl L. Wedekind, Jr, President of the Kentucky Medical Insurance Company."**

Reference Committee No. 3 recommends the adoption of Resolution F, as amended.

### **Resolution G Jefferson County Medical Society Insurance Review Board**

WHEREAS, physicians in the Commonwealth of Kentucky have experienced severe escalation of professional liability insurance rates over the past few years in response to our progressive liability crisis, and

WHEREAS, a great deal of discussion has centered around the question of appropriate rate-setting techniques based on Kentucky experience, and

WHEREAS, so long as questions remain regarding the contribution to the malpractice crisis of insurance carriers themselves, resolution to the process is nearly impossible, and

WHEREAS, at present, there are no regulations whereby a review organization approves rates set for Kentucky physicians, and

WHEREAS, it is common practice in most localities in Kentucky to require professional liability insurance before hospital privileges are granted, and

WHEREAS, the number of insurance carriers offering professional liability insurance in Kentucky is extremely limited, now therefore be it

RESOLVED, that the Kentucky Medical Association request that State Insurance Commissioner and State Legislature to establish an Insurance Review Board to promulgate and implement rules requiring professional liability insurers writing coverage within the Commonwealth of Kentucky to provide to the citizens of Kentucky actuarially sound data justifying their rates, based upon Kentucky liability experience, and be it further

RESOLVED, that such an Insurance Review Board be granted rate-setting authority with the provision that public hearings be made an integral part of the rate-setting procedure, and be it further

RESOLVED, that KMA develop and actively support the adoption of needed legislation and/or regulations appropriate to the implementation of this Resolution.

### **Recommendations, Reference Committee No. 3:**

Reference Committee No. 3 reviewed Resolution G, Insurance Review Board, introduced by the Jefferson County Medical Society, and recommends Substitute Resolution G in lieu of the three "RESOLVEDS" of Resolution G.

**"RESOLVED, that the Kentucky Medical Association Board of Trustees appoint an ad hoc committee to investigate ways to review rate policies and pre-**

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**mium levels of the various malpractice insurance carriers in Kentucky and make them accountable to the public; and further that such committee report its findings to the 1988 KMA House of Delegates."**

Reference Committee No. 3 recommends the adoption of Substitute Resolution G.

[Substitute Resolution G, as adopted, is reprinted as follows:]

## **Substitute Resolution G Insurance Review Board**

WHEREAS, physicians in the Commonwealth of Kentucky have experienced severe escalation of professional liability insurance rates over the past few years in response to our progressive liability crisis, and

WHEREAS, a great deal of discussion has centered around the question of appropriate rate-setting techniques based on Kentucky experience, and

WHEREAS, so long as questions remain regarding the contribution to the malpractice crisis of insurance carriers themselves, resolution to the process is nearly impossible, and

WHEREAS, at present, there are no regulations whereby a review organization approves rates set for Kentucky physicians, and

WHEREAS, it is common practice in most localities in Kentucky to require professional liability insurance before hospital privileges are granted, and

WHEREAS, the number of insurance carriers offering professional liability insurance in Kentucky is extremely limited, now therefore be it

RESOLVED, that the Kentucky Medical Association Board of Trustees appoint an ad hoc committee to investigate ways to review rate policies and premium levels of the various malpractice insurance carriers in Kentucky and make them accountable to the public; and further that such committee report its findings to the 1988 KMA House of Delegates.

## **Resolution U**

### **Floyd County Medical Society Insurance Reimbursement and Liability Insurance Premiums**

WHEREAS, some insurance carriers that operate across the state reimburse physicians at different rates for similar services based on the physicians' location, and

WHEREAS, costs of living, employee compensation rates and municipal taxes may be higher in rural areas than in urban areas, and

WHEREAS, liability insurance premiums are uniform statewide, now therefore be it

RESOLVED, that the KMA address the possibility of causing liability insurance rates for rural physicians to reflect regional variations in physicians' costs and third-party reimbursement levels.

## **Recommendations, Reference Committee No. 3:**

Reference Committee No. 3 reviewed Resolution U, Insurance Reimbursement and Liability Insurance Premiums, introduced by the Floyd County Medical Society.

The Reference Committee calls attention to the "Summary of Implementation of Actions – 1986 KMA House of Delegates," which in part deals with the question of equitable fee scales and equitable liability insurance premiums, and to Report No. 28, Medical Insurance and Prepayment Plans, to the 1987 House of Delegates.

Reference Committee No. 3 recommends that Resolution U be rejected.

## **Report of the Ad Hoc Committee on Indigent Medical Care**

During the 1986 session of the Kentucky General Assembly, legislation was introduced that attempted to address the problem of indigent medical care in the state titled "The Omnibus Health Care Reform Act." A portion of the bill discussed financing for indigent care. The total proposal was not successful. Since that time some legislative leaders have made a commitment to reintroduce similar legislation.

The Interim Joint Committee on Health and Welfare appointed a Subcommittee to deal with indigent care and during the interim between sessions has sought input from all principal sources on the issue. The Subcommittee has asked all groups to identify and define major problem areas, develop and propose care programs, and consider finances. As an organization, KMA was asked to become involved, and during this period also held joint discussions with other groups such as the Kentucky Hospital Association, the Kentucky Chamber of Commerce, and Blue Cross and Blue Shield.

The Subcommittee established a timetable that required all information and data to be gathered, as well as outside testimony to be heard, by mid-August, and a bill drafted by the end of August 1987. The KMA Ad Hoc Committee, composed of Russell L. Travis, MD, Lexington; Charles C. Smith, MD, Louisville; Mary P. Fox, MD, Pikeville; Doane Fischer, MD, Lexington; and Danny M. Clark, MD, Somerset, was appointed to develop a plan representing KMA's views. The timetable developed by the Subcom-



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mittee demanded that KMA express some ideas before the House of Delegates would have an opportunity for final approval. Given this qualification, a plan was developed in outline form, subject to approval.

Certain basic premises were established. It was felt that the Medicaid Program should not be "reinvented." Rather, services should be limited to primary, acute, life-threatening, or incapacitating conditions; that providers would be reimbursed only a portion of charges; and that eligibility would be restricted to those not eligible for Medicaid, the uninsured, and underinsured with incomes at or below 100% of the Federal Poverty Level.

Although indigent medical care is seen, finally, as a societal responsibility, it is only proper that Medicine should take the lead and be an advocate on this issue. Without medical leadership, developers of such a program might impose onerous provisions on the profession which could well be intolerable. Similarly, providing practical restrictions on services covered through funding availability is the only rational way to address an issue that will not improve.

With these ideas in mind, the attached outline plan was developed, subject to modification, and is recommended for adoption.

**Russell L. Travis, MD**  
**Chairman**

### Indigent Care Program

#### I. Current Situation

##### A. KMAP

1. Annual Budget (1987) \$605,000,000
2. Eligible Recipients (approximately) 325,000  
Categories:

Categorically Eligible – Aged, Blind, Disabled

Cash Assistance – AFDC, SSI

Medically Indigent

Income – up to 38% of Federal Poverty Level

##### B. Medicaid Budget Disbursement

1. AFDC – 1981 33%
2. SSI – Disabled  
1981 30%  
1985 40%
3. Medicaid expenditures for institutional long-term care were \$200,000,000 in 1985 – 40% of the total Medicaid Budget. Only 14,000 Medicaid recipients receive long-term care services (less than 4% of the total recipients).
4. There are nearly four times as many children

younger than 18 now living below the Federal Poverty Level as there are senior citizens. The total per capita government expenditures for the elderly in the 1980 study exceeded the amount spent on children by greater than three to one.

5. Poor children and families are responsible for 25 – 30% of Medicaid expenditures but compromise 70 – 75% of the case load. Aged and disabled clients on the other hand account for 25% of the Medicaid population but about 75% of the cost.

##### C. Other Indigent not Eligible for KMAP

1. Approximately 325,000
2. Many are "working poor"
3. Seasonal, minimum wage, or self-employed
4. Uninsured or underinsured
5. Age 18 to 65

#### II. Basic Premises of Indigent Care Program

- A. Limit services to those that can practically be offered; to those under 65 years of age
- B. Utilize CHR administrative capabilities already in place
- C. Insure policy making is nonpoliticized
- D. Expand or reduce eligibility based on availability of revenues from year to year
- E. Broad-based funding that is dedicated to indigent care. Recently \$12 million was taken from the Medicaid fund with a Federal match that would have amounted to \$40 million. It is estimated that in 1987-1988 approximately \$35 million from the General Fund will be cut from the State appropriation General Fund which would extrapolate with a Federal match of \$119 million.
- F. Adequate funding for a full-scale benefit program such as Medicaid is unlikely

#### III. KMAP

- A. Legislatively directed, dedicated KMAP funding. This would allow some expansion in the KMAP Program. Resulting "relief" to medical community would make Indigent Care Program (ICP) more acceptable to providers (will allow more cost shifting). Prudent management by CHR would be rewarded and shortfalls avoided. By upgrading the amount paid to providers they would more likely participate in the Indigent Care Program by allowing more cost shifting.
- B. Expand coverage to "Ribicoff" children. These are children of intact families up to the age of 18 and mothers who meet medically needy guidelines. (Began July 1)

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- C. Expand coverage to women and children under OBRA '86 and fund the state portion. OBRA '86 has a provision whereby states can cover pregnant females and children up to age 5 under Medicaid up to an income level of 100% of poverty. This can be done without a program being tied to cash assistance categories. (To be effective Nov. 1)

## Kentucky Indigent Care Program (KICP)

- I. Eligibility
  - A. Recipients – income up to 125% of Federal Poverty Level (to 175% if funds allow); non-Medicaid eligible/noninsured; under age 65. Families may be intact.
  - B. Determination – existing CHR operations using KPC guidelines
- II. Coverage
  - A. Physician care, hospital in-patient care, hospital out-patient care, out-patient primary care, pharmacy, lab, x-ray, acute and emergency care, or incapacitating treatable rehabilitative conditions.
- III. Providers
  - A. Any provider licensed to provide the stated services may participate through a contractual agreement. Program payment shall constitute full payment. The number of recipients covered and the level of reimbursement shall vary, depending on funds available. The same basic reimbursement formulae shall be employed as those used by KMAP.
- IV. Program Format
  - A. A basic KenPAC-type format shall be followed. Recipients may choose being assigned to or may seek primary care physician who shall act as case manager. The primary care physician shall provide or approve all medical services, including hospital emergency room visits.
  - B. Primary care services rendered shall be paid for on a fee-for-service basis at KMAP payment levels. Referrals for nonprimary care services shall be paid on a fee-for-service basis at KMAP payment levels.
  - C. Primary care physicians shall receive a nominal monthly case management stipend.
- V. Governing Board – Program Management
  - A. The program shall be governed by a \_\_\_\_\_ person Council. The Council shall be appointed by the Governor and shall consist of \_\_\_\_\_ representative(s) each from the following groups:

physicians (primary and specialty), hospital administrators, pharmacists, KGA, consumers. [terms and successions]

- B. The Council shall meet at least quarterly. Members shall serve without pay. The Council shall be served administratively by the Secretary, CHR, or his designee, who shall act as Executive Director. Oversight to be provided by full Kentucky General Assembly.
- C. The Council shall have full authority for program management including operations and resource allocation.

## VI. Program Operation

- A. The Program shall be operated by the Cabinet for Human Resources. Claims processing and reimbursement shall be accomplished by the Department for Medicaid Services. Little, if any, additional funding will be required. (Predictions courtesy of Department for Medicaid Services)
- B. Eligibility determinations shall be accomplished by the Department for Social Insurance. Minimal additional funding will be required. (Predictions courtesy of Department for Medicaid Services)
- C. The Council shall consider and experiment with various cost reduction measures, such as recipient co-payments, preadmission certification, preadmission testing, and mandatory ambulatory surgical procedures.

## VII. Resource Needs and Rationale

- A. Approximately 325,000 indigent are not eligible for KMAP; approximately 325,000 now eligible for KMAP.

Current KMAP budget	\$605,000,000
Less 40% mandated institutional care	\$240,000,000
	\$365,000,000

Less funds are eligible, aged, blind, and disabled; less other current KMAP services now offered	150,000,000
	\$215,000,000

to \$240,000,000

(Current approximate cost per recipient is \$660 per year)

\$57.54 per month – cost under Medicaid per enrollee per month to provide the eight recommended services

## VIII. Possible Funding Sources

- A. Luxury tax – Autos, boats, planes over \$X.00



- (\$20,000?); fur coats, jewelry, televisions, phonographic equipment over \$X.00 (\$1,000?); photographic, electronic goods, perfume
- B. Tax on all services
  - C. 1% sales tax on food items (groceries)
  - D. Tax alcohol and tobacco products
  - E. Insurance company reserves tax (health, accident, life)
  - F. Health insurance premiums (need a way to get at self-insured)
  - G. Tax on sales of securities – stock, bonds, etc.
  - H. Health Tax
  - I. Tax on selected health-related items sold in Kentucky, but not produced here; eg, pharmaceutical products
  - J. Sales tax on thoroughbred horses
  - K. Tax on employee health insurance benefits
  - L. Increase sales tax to 6% (would raise about \$170,000,000)
  - M. Additional \$1 per driver's license
  - N. Additional \$5 to renew all professional licenses
  - O. \$3 per new motor vehicle manufactured in Kentucky (two Ford plants, Corvette plant, Toyota plant)
  - P. Enrollees would be charged a premium based on income on a sliding scale basis and pay a small co-payment or deductible for services
  - Q. Employer participation
    - 1. The uninsured
      - a. 56.3% of the uninsured population is employed.
      - b. Some estimates indicate that employed people and their dependents constitute up to 75% of the uninsured.
      - c. Almost 90% of the employed, uninsured people are eligible for coverage or work for firms that don't offer health plans.
      - d. Most of these people are employed or live in families where the head is employed but not insured.
      - e. Uninsured workers are employed primarily in agriculture, construction, retail trade and personal services.
      - f. More than one-half of all of these jobs require waiting periods before insurance is provided and many part-time workers are totally excluded.
      - g. 33.9% of Kentucky's economy consists of agriculture, services and retail business – traditionally low-paying, and don't offer health insurance.
      - h. In 1983 while 82% of full-time year-round workers age 21 and over were insured by employers, or union provided health insurance, only 24% of part-time employees qualified for this benefit.
      - i. A recent Kentucky-based study found that 553,217 Kentuckians of all income levels, or 14.5% of the total employed population, were not covered by public or private health insurance because they are not provided health insurance by their employer, or they cannot or will not buy such coverage.
- IX. Other Provisions
- A. There is a need to develop a plan that small businesses and the self-employed who fit certain criteria can be allowed to participate in with varying finance sharing.
  - B. Depending upon experience, the program could be made available to individuals or categories of individuals with income above 125% of FPL based on a sliding scale, ability to pay to 175-200% of FPL.
  - C. The 1985 Commission on Financing Health Care for the Medically Indigent estimated that about 1,556,638 people are below 200% of poverty in the state of Kentucky. These are at varying levels of poverty, some at 100%, some at 125% and some at 150% of poverty. If one considers that, nationwide, persons below 125-150% of poverty or 27% uninsured, below 150-200% of poverty or 21% uninsured, this extrapolates to approximately 600,000 to 800,000 people in the state of Kentucky that are uninsured and either at or below 200% of poverty. This 600,000 to 800,000 people could participate in this program at varying levels of contribution. This could vary from a full-pay monthly premium of \$57 for the 200% of poverty. At 200% of poverty this is \$22,000 a year for a family of four. At 175% of poverty this is \$19,600 a year for a family of four, and the sliding scale premium could vary from full payment of 200% down to the sliding scale of 100% of FPL and on down.
    - 1. For small businesses and the self-employed, a voucher policy should be developed so that the small employers could use vouchers in the marketplace to buy policies or the employees use vouchers to buy premiums on group policies offered at work.
  - D. The State should encourage small employers to

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form groups for better premiums and health insurance.

- E. Consideration should be given to a payroll tax on employers; those who do not offer insurance benefits to workers would be taxed at higher rates.
- F. Small businesses could receive tax credits for enrolling employees in the statewide sponsored health insurance plan.
- G. Consideration to a state pool so that small employers could shift high-risk employees to the state pool and avoid adverse selection.

## Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed the Report of the Chairman, Board of Trustees, Ad Hoc Committee on Indigent Medical Care Report, **only**, and heard testimony by Russell L. Travis, MD, Chairman of the Ad Hoc Committee. We commend the Committee on its excellent work in organizing and outlining this proposal. We especially commend them for their foresight in suggesting multiple funding sources for this program before presentation to the Kentucky General Assembly. In addition, the Committee also heard testimony from Janie Miller, Director of Medicaid Services of CHR, in regard to the KenPAC Program. The Committee members were delighted with the success of the program and encouraged to learn that the KenPAC portion of the Kentucky Medical Assistance Program is now going to increase obstetrical service payments to 75% of UCR.

Reference Committee No. 3 recommends the Report and Recommendations of the Ad Hoc Committee on Indigent Medical Care be adopted.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 3 as a whole.

Mr. Speaker, I want to thank the members of the Reference Committee who have so ably assisted this House of Delegates in its review of some very complex issues and its formulation of policy in these matters. Members of the Committee are Larry P. Griffin, MD, Louisville; Donald R. Neel, MD, Owensboro; Paul R. Smith, MD, London; and Ronald E. Waldrige, MD, Shelbyville.

The Reference Committee would like to thank Mary McCord, MD, Whitesburg, for her invaluable help to Reference Committee No. 3.

In addition, I want to personally thank Doris Crume for her assistance in the preparation of this report.

## REFERENCE COMMITTEE NO. 3

John R. Allen, MD, Lexington, Chairman  
Larry P. Griffin, MD, Louisville

Donald R. Neel, MD, Owensboro  
Paul R. Smith MD, London  
Ronald E. Waldrige, MD, Shelbyville

## Report of the KEMPAC Board Chairman

Mr. Speaker, fellow Delegates and guests,

As chairman of the KEMPAC Board of Directors, thank you for giving me the opportunity to report on KEMPAC activities this past year.

We express our appreciation to all of you who attended the seminar on Monday evening and are especially grateful to you who brought your legislators. As most of you know, both gubernatorial candidates were invited to speak, but Wallace Wilkinson, the Democratic candidate did not appear. Representative John Harper, the Republican candidate, gave a good presentation, as well as Joseph L. Hatch, MD, AMPAC Board Chairman.

The KEMPAC Board of Directors has started reviewing candidates for the 1988 races and urges you, as leaders of KMA, to keep the KEMPAC Director in your area apprised of your local political activity.

We have good news regarding KEMPAC'S membership. The goal of 20% of KMA active members has been reached. However, if you, as a Delegate, have not joined this year, we ask that you join and recruit one member.

Let us recognize the outstanding counties for this year.

Pike and Trimble counties have 100% membership in KEMPAC.

Other counties who received membership awards were:  
Counties with 100 or more KMA membership:

First Place, McCracken County

Second Place, Fayette County

Counties with 50-99 KMA members:

First Place – Whitley County

Second Place – Boyd County

The Seventh Congressional District received the award for having the highest percentage of KMA members as KEMPAC members, and, the best for last, our outstanding recruiter, Doctor Charles Allnutt, of Northern Kentucky received the recruitment award for highest number of KEMPAC members.

The KEMPAC booth is set up in the lobby across from KMA's registration. You may pay your dues or recruit members there. We invite you to stop by.

In 1986, as in the past 25 years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC and recommended 100% participation by doctors and their spouses. It further recommended a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts on



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behalf of our free enterprise system and the freedom of the art and science of medicine.

I move that you reaffirm this endorsement and approve KEMPAC billing with the KMA dues billing. I wish to ask that you include your contribution when sending in your other dues. This is your organization and you must support it!

On behalf of the KEMPAC board, I want to thank the KMA Board of Trustees, you Delegates, the Auxiliary to KMA and staff for your help and support.

**Harold L. Bushey, MD**  
Chairman

A motion was made, seconded, and carried to adopt the Report of the KEMPAC Board Chairman.

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*Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.*

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### **REPORT OF REFERENCE COMMITTEE NO. 4**

**Mark F. Pelstring, MD, Covington**  
Chairman

Reference Committee No. 4 considered the following Reports and Resolutions:

- 28. Report of the Committee on Medical Insurance and Prepayment Plans
- 29. Report of the Committee on Claims and Utilization Review
- 30. Report of the Coordinating Commission on Peer Review Activities
- 31. Report of the Committee to Investigate Changing Trends in Medicine
- Resolution H - Trustee District Peer Review Appeals (Jefferson County Medical Society)
- Resolution I - Medical Care Review (Jefferson County Medical Society)
- Resolution J - Managed-Care Plans (Jefferson County Medical Society)
- Resolution V - Third-Party Encumbrances (Jefferson County Medical Society)

#### **ITEMS FOR CONSENT**

Reference Committee No. 4 reviewed the following items and recommends they be filed or adopted as indicated, by the consent of the House, without discussion:

- 28. Report of the Committee on Medical Insurance and Prepayment Plans - adopted
- 29. Report of the Committee on Claims and Utilization Review - filed

### **Report of the Committee on Medical Insurance and Prepayment Plans**

The Committee on Medical Insurance and Prepayment Plans met November 20, 1986; May 13, 1987; and July 1, 1987.

#### **House of Delegates Referrals**

Resolution DD — KMA-Endorsed Medical Insurance Program for the Membership — was referred to this Committee. Resolution DD was introduced on behalf of the Committee and adopted by the House of Delegates in 1986 to give the Committee the option of adding certain cost-containment provisions to the KMA-endorsed Blue Cross and Blue Shield health insurance program. However, because of the effect previous changes and experience in the plan have had on premiums, the Committee voted unanimously to recommend to the Board that we continue to offer KMA's current plan options without any changes. The Committee will continue to monitor the utilization of KMA's endorsed group health coverage plan and make recommendations to the Board of Trustees as appropriate.

Resolution N — Third-Party Fee Discrimination in Kentucky — was adopted by the KMA House of Delegates in September 1986 and referred to this Committee for discussion and recommendations. Resolution N addressed the variances in payment under the Blue Cross and Blue Shield Usual, Customary, and Reasonable plan and called on KMA to address Blue Cross and Blue Shield on the issue of discrimination and, if necessary, consider legal action against third-party payors who discriminate without justifiable cause against one's location of practice. Anita Kotheimer, MD, a practicing obstetrician-gynecologist in Shelby County and author of the Resolution, met with the Committee in May. Doctor Kotheimer explained that, when she practiced in Louisville, she received certain fees for caring for patients insured by Blue Cross and Blue Shield. However, when she moved her practice to Shelbyville, she received lower fees from Blue Shield for the same services. She explained she had to get the same training, pass the same medical licensure examination, pay the same professional liability insurance premium, and uphold the same standard of quality of care as her colleagues across the state. Because she lives in a small community, she is reimbursed less than her

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Louisville counterparts for similar services. Doctor Koth-eimer felt this practice discriminated against physicians practicing in nonurban communities, making it more difficult for obstetricians to practice in nonurban areas at a time when patients in those areas need them most.

That was the basis for the development of the Resolution adopted by the House.

Most of the Committee's discussion at its meetings in May and July was devoted to the UCR program with Blue Cross and Blue Shield representatives. Those discussions led to the development, by Blue Cross and Blue Shield, of a paper on The History of Usual, Customary, and Reasonable as developed by Blue Cross and Blue Shield of Kentucky. The paper is reproduced in its entirety as follows:

### *The History of Usual, Customary, and Reasonable Blue Cross and Blue Shield of Kentucky*

The usual, customary, and reasonable program administered by Blue Cross and Blue Shield of Kentucky can be traced back to 1964 when it was first introduced in the Jefferson County, Kentucky, area by the National Association of Blue Shield plans for a large, local employer. Over the next two years, numerous discussions regarding the concept and administration took place with the Jefferson County Medical Society and the Kentucky Medical Association. In 1966, the Kentucky Medical Association went on record in support of the principle of payment of physicians' fees on a usual, customary, and reasonable basis. During the 1966 House of Delegates meeting, a Resolution was adopted authorizing a statewide voluntary survey of fees in order to gather fee information from physicians throughout the state. The fee surveys returned demonstrated that initially there were three distinct patterns in the fees charged by physicians, depending upon the location of the area in which they practiced. From this information, the state was then divided into three actuarial, medical-economic areas. More recently, the distinction in charges between communities has diminished.

In September 1968, at the Annual Meeting of the Kentucky Medical Association, the House of Delegates adopted a Resolution which reaffirmed support of the principle of payment of physician fees on a usual, customary, and reasonable basis and provided for the professional review of claims that could not be processed routinely.

Following the 1969 House of Delegates meeting, Blue Cross and Blue Shield of Kentucky staff began contacting all Kentucky physicians, encouraging them to sign participating agreements. Blue Cross and Blue Shield of Kentucky then revised its certificates of membership to include the usual, customary, and reasonable program as a reimbursement mechanism for professional service.

The usual, customary, and reasonable program has been widely accepted as the preferred choice of employers, employees, and

health care insurance plans in Kentucky for almost twenty years. Only a small minority of Blue Cross and Blue Shield of Kentucky policyholders have contracts that provide for indemnity payments. Over 1,000,000 Kentuckians are covered under usual, customary, and reasonable contracts underwritten and administered by Blue Cross and Blue Shield of Kentucky.

Nearly all health care insurers have followed the lead of Blue Cross and Blue Shield of Kentucky and now offer usual, customary, and reasonable programs.

Individual physician fee profiles can be traced back to 1975 when the Kentucky Medical Association House of Delegates adopted a report of the Kentucky Medical Association Advisory Committee to Blue Cross and Blue Shield of Kentucky which encouraged the development and implementation of such profiles. During late 1975 and early 1976, Blue Cross and Blue Shield of Kentucky developed new participating physician agreements that contained all the elements of the initial contract plus the use of individual physician profiles. The agreement also provided that physicians could update their fees once a year with a 45-day advance written notice.

The usual, customary, and reasonable payment concept is based on payment at the 90th percentile of physician charges. This means that physicians are reimbursed at a level where at least 90 percent of physicians' charges and where 90 percent of submitted claims can be paid in full. The usual, customary, and reasonable guidelines are developed using twelve months of actual charges submitted by all physicians, and are updated quarterly. Physicians are reimbursed their recorded usual fee or the Blue Shield 90th percentile (maximum allowance), whichever is less.

The implementation of physicians' fee profiles and the payment methodology has resulted in a claims payment process that provides routine payment of an overwhelming majority of claims. For those few claims that cannot be routinely processed, Blue Cross and Blue Shield of Kentucky utilized district, county, and state peer review organizations for assisting in the resolution of claims. This procedure has served the public, Blue Cross and Blue Shield of Kentucky, and the medical community well over the years. This is demonstrated by the fact that over 81 percent of Kentucky's physicians participate in the usual, customary, and reasonable program. A small minority of cases needs to be referred to the peer review mechanism.

As a participating physician, the physician agrees to accept his/her usual fee or the Blue Cross and Blue Shield of Kentucky payment allowance as payment in full. He/she further agrees not to bill the patient for any balance of the charges for covered services except for deductibles and/or coinsurance, where applicable. Nonparticipating physicians' fees are reimbursed at the same level; however, the patient is paid directly for covered services received. The nonparticipating physician must look to the patient for the collection of his/her fee.

Following requests from many employers and policyholders, Blue Cross and Blue Shield of Kentucky published a listing of



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all participating physicians, by county, in 1986. This publication, which is scheduled to be updated annually, assists our members by advising them in advance if services are to be rendered by physicians who commit to the concept of usual, customary, and reasonable.

As stated above, before the program went into operation a number of years ago, physicians in the state voluntarily submitted their usual and customary charges to Blue Cross and Blue Shield. The result of the survey was that fees fell into roughly three areas, and those areas, updated over the years, still exist today. It was reported, however, that not all physicians in a given area are paid more for a certain service simply because they are in that area. For example, a physician in Area III, which typically has lower aggregate charges than a physician in Area I, may be paid more for a specific service than an Area I physician. Similarly, an Area I physician may charge less for a certain procedure than an Area III colleague, and as a result, would be paid less than an Area III colleague.

KMA's long-standing position is that any payment program based on a UCR concept should operate on a single statewide payment basis. Because Blue Cross and Blue Shield indicated in our discussion that variances in payment in the three areas had narrowed considerably over the years, the Committee asked Blue Cross and Blue Shield to take ten common services and compare reimbursement to charges in the three different areas. The Committee also asked Blue Shield to take those same services and payments and project the payments based on a single payment area.

A study was done on eight high-volume surgical procedures, one high-volume laboratory procedure, and one high-volume x-ray procedure. The procedures were weighted to reflect the volume of procedures in the various areas. They were then reviewed to: (1) determine the variation in payment between areas and, (2) were projected on a single payment area basis to determine the changes that would result if payment was made on a statewide rather than a three-area payment basis. Blue Cross and Blue Shield did not give the Committee the actual fees used. We were given percentage differences between the areas.

The result of this exercise indicated there is a variance in payments made by Blue Cross and Blue Shield to physicians depending upon the area of the state in which the physician practices. The variance in payment on a percentage basis is significant for some procedures and insignificant for others. Physicians in Area I (Louisville/Lexington) do not uniformly receive higher fees than those physicians providing the same or similar services in Area III (rural areas). If Blue Cross and Blue Shield were to adopt a single payment area policy, the net result to Blue Cross and Blue Shield, based on these ten services, will be an overall re-

duction in payments to physicians of 2/10 of 1%. Payment for some procedures in each area would go up while some would be reduced. All areas would be affected.

While the ten services used in the study comprise a high volume of physician services Blue Cross and Blue Shield covers, they are only ten out of over 2,000 services covered overall. However, because of this study, Blue Cross and Blue Shield is investigating the possibility of evaluating the economic impact of eliminating payments based on the existing three areas.

As a result of the Committee's discussion with Blue Cross and Blue Shield representatives about the operation of the UCR program, the Committee, in response to Resolution N, believes:

- (1) There is no evidence of Kentucky Blue Cross and Blue Shield deliberately discriminating against physicians based on their practice location. Variances in payments do exist. We believe they are the result of payment for individual charges based on individual profiles.
- (2) The Committee does not find sufficient reason for KMA to consider legal action, based on alleged discriminatory practices, against Blue Cross and Blue Shield or any other carrier that utilizes a payment system designed to pay usual, customary, and reasonable charges.
- (3) The Committee feels that existing Association policy regarding UCR programs continues to be appropriate. That policy states: "Resolved, that the Kentucky Medical Association not only urge all third-party carriers, but use every legal means at its disposal, to bring about an equitable payment plan for all doctors in the state, and be it further Resolved, that such a plan be based on service and not on geographic or economic location." (Resolution H, adopted September 1972)

### UCR Guidelines Revision

In the course of discussing the UCR program in response to Resolution N, the Committee also discussed the so-called "guidelines" that were developed by Blue Cross and Blue Shield in 1976. (The current "guidelines" are attached to this report). The guidelines have been used to describe the operation of the program to physicians. For several reasons, Blue Cross and Blue Shield have been advised that they should consider amending that description. They are considering the adoption of the description of the History of Usual, Customary, and Reasonable, Blue Cross/Blue Shield of Kentucky, beginning on page 2 of this report, as their description of the program. Adoption of that description would result in a fundamental change in the description of the operation of the Kentucky Blue Shield UCR program by deleting references to the role of the KMA Claims &

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Utilization Review Committee in determining the reasonableness of disputed claims and by deleting the definition of the terms usual, customary, and reasonable. The current program description states that Blue Shield will abide by the decision of the Review Committee, paying those claims judged to be reasonable, denying those claims judged to be unreasonable.

The draft document, as this Committee interprets it, would by deletion release Blue Shield from any obligation to pay disputed fees judged to be reasonable by a review committee, KMA's or anyone else's. Blue Shield could simply refuse to pay the claim or could arbitrarily reduce the amount to be paid. However, because a physician has signed a Blue Cross and Blue Shield participating physician contract, that physician would not be able to bill the patient for the amount of that charge not paid by Blue Shield.

The Committee notes that only ten claims involving fees were reviewed this past year, so the practical impact of such a change would appear to be minor. However, the Committee felt the membership should be aware that this change is being considered. One other proposed change would delete terminology defining usual, customary, and reasonable. The Committee feels the definition is important because different UCR plans encompass different definitions of the terms usual, customary, and reasonable.

The Committee voiced its concern with these proposals to Blue Shield representatives. We make no recommendations to the House of Delegates at this time since we are told that these proposals are still being discussed and are subject to change. The final draft will be discussed with the Committee and the KMA Board of Trustees before implementation.

### Diagnostic Testing Guidelines

The National Blue Cross and Blue Shield Association has an ongoing Medical Necessity Program. That program developed and implemented a number of guidelines over the years as part of a cooperative effort between medical specialty societies and the Blue Cross and Blue Shield Association. These national guidelines are made available to local Blue Cross and Blue Shield plans, and Kentucky Blue Cross and Blue Shield has always brought those proposals to KMA for comment and suggestions before being implemented. This year the Committee was given a set of Diagnostic Testing guidelines and was asked to comment on them. In addition, the guidelines were furnished to the members of the KMA Interspecialty Council for review.

These same guidelines were discussed during the Annual Meeting of the American Medical Association this past June. There was extensive testimony presented about the Diag-

nostic Guidelines and much of it highlighted concern with the rigid and inappropriate use of the guidelines by some third-party payors.

As a result, the AMA Board has been asked to study and comment on the guidelines before they are implemented. The Committee members were of the opinion that implementation of the guidelines as presented would have an adverse effect on the quality of medical care, and in some instances, could contribute to the rendering of inappropriate care. Therefore, your Medical Insurance and Prepayment Plans Committee has serious reservations about the Medical Necessity Program Diagnostic Guidelines as now presented and recommends that Kentucky Blue Cross and Blue Shield neither adopt nor implement the distribution and use of the Diagnostic Guidelines until further modifications have been suggested by this Committee and the Interspecialty Council.

Over the course of this year, a number of other items have been discussed with Kentucky Blue Cross and Blue Shield. Kentucky Blue Cross and Blue Shield has set up a Personal Care Program whereby the medical staff at Blue Cross and Blue Shield work with physicians in hospitals to help treat patients with particular illnesses or situations in a home setting rather than in an institution. At the present time, most of these cases have been IV-antibiotic patients. While this is a somewhat experimental program at the moment, the Committee feels it has merit and encourages its continuation. The Committee also heard a report that physicians are listing a high number of procedures on their individual profiles. Blue Cross and Blue Shield is considering limiting the number of procedures listed on physician profiles to somewhat in the neighborhood of 100 to 200 procedures.

We learned Blue Cross and Blue Shield is considering revising the description of its Assurance Plus Program. One idea is to encourage physicians not to admit patients to the hospital until the actual day of their scheduled surgery. The Committee felt there are certain preoperative procedures that must be done the night before surgery and some patients have to travel some distance to get to a hospital. We strongly urged that Blue Cross and Blue Shield reconsider adopting this policy.

As Chairman, I extend my appreciation to the members of the Committee for the time and hard work they provided to the Association this year. The issues discussed by this Committee are not easy ones, but your Committee members remain committed to representing the interests of the membership and I am very grateful for their participation.

Earl P. Oliver, MD  
Chairman



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## RECOMMENDATIONS:

1. The Committee recommends that the Association reaffirm existing policy regarding UCR programs which states:  
"RESOLVED, that the Kentucky Medical Association not only urge all third-party carriers, but use every legal means at its disposal, to bring about an equitable payment plan for all doctors in the state, and be it further  
RESOLVED, that such a plan be based on service and not on geographic or economic location." (Resolution H, adopted September 1972)
2. The Committee members were of the opinion that implementation of the Diagnostic Guidelines as presented would have an adverse effect on the quality of medical care, and in some instances, could contribute to the rendering of inappropriate care. Therefore, the Committee recommends that KMA request that Kentucky Blue Cross and Blue Shield neither adopt nor implement the distribution and use of the Medical Necessity Program Diagnostic Guidelines until further modifications have been suggested by the KMA Committee on Medical Insurance and Prepayment Plans and the KMA Interspecialty Council.

### BLUE SHIELD OF KENTUCKY USUAL, CUSTOMARY AND REASONABLE GUIDELINES

In September, 1968, the Kentucky Medical Association House of Delegates adopted a resolution which reaffirmed support of the principle of payment of physicians' fees on a Usual, Customary and Reasonable basis and provided for the professional review of claims that could not be processed routinely. The resolution encouraged physicians to establish local review committees. The resolution also provided for the establishment of the KMA Claims Review Committee, including representatives from all major specialty groups, to review cases from counties too small to form local committees, to review cases referred to it from Blue Shield of Kentucky or other county societies, and to act in an advisory capacity to Blue Shield of Kentucky in the development of guidelines for the administration of the program.

The KMA Claims Review Committee held its first meeting on November 21, 1968, and adopted guidelines and terminology to be used in the administration of the Usual, Customary and Reasonable Program.

The Committee approved the following terminology:

**Usual** - The "usual" fee is that fee usually charged for a given service by an individual physician to his private patient (i.e., his own usual fee).

**Customary** - A fee is "customary" when it is within the range of usual fees charged by physicians of similar training and experience, for the same service within the same specific and limited geographical area (socio-economic areas of a metropolitan area or socio-economic area).

**Reasonable** - A fee is "reasonable" when it meets the definitions for both usual and customary, or in the opinion of the responsible medical association's review committee, is justifiable, considering the special circumstances of the particular case in question.

The 1969 Kentucky Medical Association House of Delegates in adopting the report of the Kentucky Medical Association Advisory Committee to Blue Shield reaffirmed support of the principle of payment of physicians' fees on a Usual, Customary and Reasonable basis and clarified the intent of the program with reference to the "paid-in-full concept."

The report clarified that any reference to paid-in-full coverage clearly identify those services which are indeed covered on a paid-in-full basis and also identify the circumstances under which those services must be rendered to all third parties.

The report confirmed that Usual, Customary and Reasonable and the "paid-in-full concept" be one and the same and to make the program operative the following requirements are necessary:

- A. Physicians can signify their support of the Usual, Customary and Reasonable concept by being a "participating" physician and by signing an agreement to that effect.
- B. A physician who does not accept this concept could elect to not sign a participating physician agreement.
- C. Participating physicians would agree to accept as payment in full allowances made by Blue Shield's Usual, Customary and Reasonable program for covered services using guidelines established by the KMA Claims Review Committee. Peer Review committees, which are a part of these guidelines, will make the final recommendations for reasonable allowances on cases that cannot be processed routinely. Payments will be made direct to the participating physician.
- D. Blue Shield's allowances for covered services rendered by non-participating physicians will be determined using the same guidelines as for participating physicians ex-

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cept payment for covered services will be made direct to the subscriber.

The 1975 KMA House of Delegates approved the report of the Advisory Committee to Blue Cross and Blue Shield which encouraged the development and implementation of individual physician profiles in the administration of this program. Individual physician's fee profiles are established from current Blue Shield paid claims history. Each participating physician will be personally contacted by a Professional Relations representative to discuss his own fee profile and an agreement should be reached as to the acceptability of this statistical information. After an agreement has been reached regarding the acceptability of the individual fees listed in the physician's profile, each physician can update his profile on an annual basis by notifying Blue Shield of Kentucky 45 days prior to the proposed effective date. In processing Usual, Customary and Reasonable claims, the 90th Percentile technique and individual physician fee profiles are used as the basic guidelines for making routine payment. The 90th Percentile is that charge within the range for a given procedure that pays in full a minimum or 90 percent of all physicians' charges and a minimum of 90 percent of all claims filed. Experience shows that this technique had provided routine payment in excess of 98 percent of all cases filed under the Usual, Customary and Reasonable Program, *The 90th Percentile guidelines will continually be revised and updated as physicians' fees change.* The revision of the 90th Percentile will be based on actual charges of physicians as indicated on claims received by Blue Shield of Kentucky. The program provides flexibility with the continuous re-evaluation of the 90th Percentile guidelines.

Using the 90th Percentile and individual physician's profiles as a basic guideline, claims for covered services are processed routinely. If claims are submitted with fees exceeding the guideline for routine payment, the claim will be processed based on the agreed upon amounts as listed in his individual profile or the guideline amount if there is no profiled charge. Claims involving unusual circumstances (i.e., the procedure performed is not included in the physician's individual profile, the procedure involves multiple surgery, there were unusual or complicated medical circumstances, etc.) will receive additional consideration. Claims with payments less than the physician's actual charge may be referred to the appropriate peer review committee.

It is the responsibility of the review committee to recommend a reasonable allowance for the service rendered based on the information available and with consideration given to any additional information provided by the physician, the patient or Blue Shield of Kentucky. Blue Shield of Kentucky and the participating physician agree to abide by the committee's recommendation.

The success of the Usual, Customary and Reasonable Program and the fact that enrollment is steadily increasing is positive evidence that physicians can voluntarily work with the private sector to provide better benefits to the public.

### Report of the Committee on Claims and Utilization Review

The Committee on Claims and Utilization Review has had less occasion to meet this year than in previous years. This has been due, in part, to the work of the Trustee District Committees, which continue to constitute the backbone of the KMA peer review system. Additionally, fewer claims have been submitted by carriers.

There are a number of factors which may influence reduction in claims, but a predominant one is probably the growth of various alternative delivery systems. There is no question that the majority of medical insurance claims generated continue to be from traditional policies. However, many large employer groups have imposed various cost-reduction and internal review mechanisms that have resulted in fewer and fewer aberrant claims as subjects for peer review. Conversely, the system had seen a marked increase in the number of claims from self-insured groups and managed insurance plans. It is gratifying that KMA's system has credibility with the self-insured and other groups, which are relatively new to the claims processing industry.

The incidence of claims involving excessive prescribing has also declined this year. It is not known if this is because of closer scrutiny in-house by carriers or the general difficulty in identifying these practices. It is assumed that the statistical incidence of excessive prescribing has not decreased, based on the continual findings and activities of the Board of Medical Licensure.

A number of cases were seen this year which involved fine contractual points between the patient and the insurance company that had an unfortunate influence on medical practice without the physician's direct involvement. As alternative delivery programs emerge and new nontraditional insurance coverages proliferate, it is increasingly difficult for the physician's office to be able to keep abreast of the billing and coverage requirements of various insurance plans. While insurance coverage should have absolutely no effect on the provision of medical care, from the physician's standpoint, such requirements may well have an effect on billing, reimbursement, and other administrative practices, which eventually result in a disruption of the physician/patient relationship.

Although the Committee would not pretend to advise as to the efficiency of any given program, the members would caution all physicians to try to become familiar with the specifics of major insurance programs. The Committee would also encourage physicians to determine coverage limits and other administrative insurance requirements prior to treating patients to avoid any misunderstandings.



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While this Committee has the privilege of reporting to the Board of Trustees annually, there is no direct mechanism to advise of the work of the District Committees. It is appropriate that the membership be appreciative of the efforts of these District Committees, and I would like to thank their members, as well as members of the state Committee, for all of their work during the year.

**K. Thomas Reichard, MD**  
Chairman

### END OF CONSENT CALENDAR ITEMS

#### **Report of the Coordinating Commission on Peer Review Activities**

The Coordinating Commission on Peer Review Activities was created by the House of Delegates. Its purpose is to oversee and direct issues to the various components of the peer review system.

The Commission consists of the Speaker of the House; a member of the Board of Trustees; and the Chairman of the Judicial Council, Claims and Utilization Review Committee, and Committee on Impaired Physicians. The oversight authority of the Commission also extends to extraordinary matters which may arise that cross jurisdictional lines among the components of the system.

No issues developed this year which required the Commission's review, as all matters were dealt with by the individual components and handled administratively by staff under the direction of the Board of Trustees.

Since its creation by the House of Delegates, this Commission has had no assigned work. While some coordination among the various peer review functions of the Association is appropriate, it is felt that this might best be accomplished through the Board of Trustees, and the Commission feels that its termination is appropriate.

**Earl P. Oliver, MD**  
Chairman

1. The Coordinating Commission on Peer Review Activities recommends its termination.

#### **Recommendations, Reference Committee No. 4:**

Reference Committee No. 4 reviewed Report No. 30, Report of the Coordinating Commission on Peer Review Activities and its recommendation that the Coordinating Commission on Peer Review Activities be terminated. The Committee would like to thank Doctor Oliver and the members of the Coordinating Commission on Peer Review Ac-

tivities for their willingness to serve the Association and recommends the Report of the Coordinating Commission on Peer Review Activities be adopted.

#### **Report of the Committee to Investigate Changing Trends in Medicine**

The Committee to Investigate Changing Trends in Medicine held two meetings this year, December 4, 1986, and April 1, 1987.

The charge to the Committee is to study and report on evolving delivery and payment mechanisms; to study and report on demographic trends affecting medical practice; to study and report on ethical questions regarding financial considerations versus quality of life; to investigate trends in cost containment activities and to determine, to the extent feasible, the role of organized medicine in this changing environment.

Most of the Committee's effort this year was devoted to the implementation of two Resolutions which were adopted by the House of Delegates last September and referred to the Trends Committee by the Board of Trustees.

#### **Resolution J**

Resolution J called for KMA to develop and maintain a data file on alternate delivery systems in the state. As a result, a data file on HMOs has been developed, based on records maintained by the Kentucky Department of Insurance, and is available at the Headquarters Office. The information includes detail on each HMO's legal organization, marketing plan, benefit structure, projected enrollment, officers and directors, articles of incorporation, certificate of authority, service area, financial and condition statements, and provider agreement samples. A summary of the information on file was distributed to the membership in January of this year and updated in June.

The summary includes the company's name, primary administrative office, telephone number, administrator, date business commenced, type of plan, geographic market area, legal organization, officers and directors, enrollment figures, and number of participating physicians. When available, information on the profit and/or loss of each company is also noted. (The most recent summary follows this report).

#### **Resolution Q**

The Committee also discussed and made recommendations to implement Resolution Q. Resolution Q was introduced by the Jefferson County Medical Society and addressed

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the loss of control of the practice of medicine by physicians and the hardships and inconvenience placed upon patients by contractual restrictions encompassed in various third-party payment programs. In our discussion of the Resolution, there was general agreement among the Committee that what was most troubling to the majority of physicians regarding alternate delivery systems is a perceived or real loss of control over the care provided to the patient. Other factors contribute to that feeling. Most delivery systems require a contractual relationship. Many physicians do not understand such agreements and the Committee heard about several instances of physicians signing contracts before they were read. Most physicians feel uncomfortable negotiating changes and often find, if changes are not negotiated, that the contract may place major constraints on their practice.

Physicians see their overhead increasing while third parties ask for additional discounts. In many instances, physicians must ask someone else, often a nonphysician, for approval to do what the physician feels is in the best interest of a patient. The Committee felt that the issue should be addressed in a positive manner with KMA assuming a stronger role as advocate of the physician and the patient. KMA's goal should be to give patients and physicians enough information to make an informed choice in choosing a health plan. Organized medicine's leadership in this area will help physicians choose appropriate plans in which to participate and inform patients of both positive and negative aspects of various coverage arrangements.

The Committee's recommendations were in three major areas. First, since all plans rely on physician participation, physicians must become better informed before agreeing to participate. Participating agreements and/or contracts should be reviewed, evaluated, and, if necessary, negotiated before they are signed.

Second, patients must become better educated about some of the potential negative aspects of alternate delivery plans. It was felt that the physician's office was a good place to provide that information.

Finally, decisions as to which plan will be offered to employees are often made by employers or unions. Currently, most of the information provided to these decision makers comes from insurance carriers. Efforts must be made to communicate with decision makers to discuss alternate delivery problems. Emphasis should be on quality of care and freedom of choice of physician and hospital as in the patient and employee's best interest.

The following is a summary of the recommendations made to implement Resolution Q, which were approved by the Board of Trustees in April. A number of these recommendations have been implemented with others anticipated to be underway by the time the House meets in September.

### Update Existing HMO Data Base

KMA will continue to update its existing information on alternate delivery systems on a periodic basis and will publish summaries of the status of alternate delivery systems in the "Communicator" and *Journal*, as appropriate.

### Policy Statement on Administrative Pressure to Ration Care

To enhance physician awareness of the ethical responsibility and legal obligation to resist administrative pressures to inappropriately reduce or avoid care, the KMA Judicial Council, working in conjunction with KMA's legal advisor, was asked to draw up a policy statement or opinion on this issue. The Committee felt it would be helpful for a physician to have such information if asked to take an action which the physician feels is not in the patient's best interest.

### Contracting Guide

Several state medical societies have developed materials to help guide physicians faced with contracting with managed care systems. The Committee and KMA's attorney reviewed a number of these documents and felt that such information would be helpful if available to physicians in Kentucky. Because of the expense and time factors involved in developing such a document, the Committee recommended that KMA make the membership aware of a contract guide which was developed by the Pennsylvania Medical Society. The guide is well written and examines a number of contract areas which could prove to be troublesome to physicians. The guide is available through the Headquarters Office and order forms have been provided to the membership. Pennsylvania Medical Society is making the guides available to Kentucky physicians at the same price charged to PMS members.

### Contract Review Service

The Committee felt it would be most useful for KMA to provide a conduit to knowledgeable professionals who could review and evaluate certain contracts, if requested. While there are many competent attorneys in Kentucky, the issue of health contract law is highly specialized, and there are few firms that the Committee was aware of in the state that have been involved in this area. The Committee and the Board of Trustees were reluctant to endorse a particular law firm. At the same time, they felt an obligation to make the membership aware of legal experts who are experienced and knowledgeable in this particular area and who, KMA felt, were philosophically sympathetic to medicine. As a result, a contract review and negotiation service is being



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implemented through KMA's legal counsel, Stites and Harbison, Louisville. Requests for this service can be made directly to the firm by the physician or the physician group. The firm will form an independent attorney/client relationship with members on a case-by-case basis, subject to availability of expertise, the client's needs, and the absence of any conflict of interest.

Review of standard provider contracts will be done on a flat rate basis so physicians utilizing the service will have an idea in advance of what the cost of the analysis will be. Review of other contracts—such as, leases, employment agreements, partnership agreements, joint ventures, stock options, and new business enterprises—are available at the firm's usual hourly rate. In addition, the Headquarters Office maintains a file on other consultants, both in Kentucky and in other parts of the country, that have experience in this area. The Committee feels this should be a most helpful service to the membership.

### Problem Data Bank

Over the past two years, the Committee has heard a number of anecdotal reports of inappropriate pressure by alternate payment systems which were felt to be detrimental to quality patient care. With that in mind, the Committee recommended that KMA develop a data bank to collect information from physicians and patients reporting problems with insurance companies and/or concerns over quality of care. Such reports would be in writing and concern only quality of care issues, not fee or reimbursement issues. Each report would be handled individually. If indicated, complaints should be referred to the Board of Medical Licensure, Department of Insurance, or other agencies. In addition, the Committee felt that, at the appropriate time, a letter should be sent to large employer/purchaser groups emphasizing KMA's interest in quality care. The letter would solicit information on problems those companies may be having with both third parties and physicians. We feel this will provide a forum to discuss many of the issues concerning managed care systems from a quality of care standpoint.

### Patient Education

Finally, the Committee felt many of the problems regarding alternate delivery systems result when patients who, either through their employer or on an individual basis, enroll in managed care plans without completely understanding some of the limitations they agree to accept in return for a lower premium. The Committee felt that one way to address that issue would be to develop a brochure containing information on health plans and questions that should be asked by patients. These would be available through

physicians' offices. A joint effort with the Jefferson County Medical Society is underway to develop and distribute such a brochure which will be available at a small charge. Those physicians desiring to make it available to their patients, we feel, will provide a needed educational process that should prove helpful to both patients and physicians. Because it is difficult to ascertain a true cost benefit ratio in developing such a document, the Committee felt any undertaking of this nature should be done on a trial basis with only a limited number of pieces printed initially.

The Committee feels that medicine must take the leadership role in educating physicians, our patients, and business entities about managed care systems. These activities will not make alternate payment systems go away. They will put physicians in a better position to make informed decisions.

Whether managed care systems prove to be as cost effective as early reports indicated remains to be seen. In Kentucky, as in other parts of the country, managed care systems have enjoyed rapid enrollment growth. However, in Kentucky, that growth has come at the expense of significant start-up costs. Figures reported to the Kentucky Department of Insurance by managed care systems as of December 31, 1986, indicated that only two companies were making a profit while the rest reported losses totaling \$14,107,484.

Competition between plans is fierce, but health costs continue to rise. Health economist Eli Ginsberg, writing in the *New England Journal of Medicine*, stated that managed care systems face steeply growing costs of marketing, are unable to produce the types of savings to employers that were once anticipated, and are confronted with difficulties inherent in structuring and managing large prepaid plans while patients and employers insist on greater assurances of quality control.

Jeff Goldsmith, PhD, a health economist with Ernst & Whinney, wrote in the December 26, 1986, issue of *JAMA*, . . . *It is becoming apparent to employers that what HMOs do, employers can do for themselves while retaining conventional health insurance coverage. Employers have been able through preadmission review, mandatory second surgical opinion programs and other utilization control vehicles, to impose standards of medical necessity on their employees that are, in some cases, more rigorous than those of HMOs . . .*

He goes on to say,

*. . . Community standards of hospital use are rapidly converging on HMO standards, erasing much of the economic margin that HMOs have used to compete against fee for service plans. As HMOs have not been better able to restrain the rate of increase in health costs than non-*

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*HMO providers, prepaid health plans do not seem to have a long-term sustainable competitive cost advantage over externally managed fee-for-service practice.*

The for-profit hospital industry, which was one of the driving forces in the move to a competitive delivery system, seems to have lost some momentum. Some chains have begun to sell off unprofitable hospitals. Others are divesting themselves of unprofitable services such as walk-in "satellite" offices and home health care operations.

Because these private sector approaches to the containment of health costs have been largely unsuccessful in restraining health cost inflation, government may well begin to take a more aggressive role in addressing the issue. Rather than accepting the real causes of health care inflation—such as continuing advances in technology, population growth, and rising hospital labor prices—government is likely to pursue the more politically expedient solution of mandating assignment of Medicare and Medicaid beneficiaries as a condition of licensure, which will be one more step toward a nationalized delivery system.

### Health Policy Agenda for the American People

The Committee also discussed the Health Policy Agenda for the American People which was initiated by the American Medical Association in 1982. Since that time, 425 representatives from 172 different health, health-related, business, government, and consumer groups have met and developed an extensive report. The mission of the Health Policy Agenda was to examine immediate health concerns

of today as well as those issues that will be confronting the health sector into the next decade and next century. The goal of the undertaking was to develop policy statements based on a wide range of interests which would be ongoing and stable instead of constantly changing based on political expediency. The conclusions are based on the major premise that a consensus approach among knowledgeable people will yield reasonable and workable results. The Agenda is now entering its implementation stage, and the Committee was asked by the Board of Trustees to review the summary of the HPA report and provide recommendations as to what role KMA might play in the implementation of the project.

The summary of the report contains 195 separate recommendations under seven broad categories. Developing positions for such a large volume of information in the course of one meeting was not possible.

The AMA House of Delegates will consider the report of the Health Policy Agenda steering committee and the Committee will monitor AMA positions and make recommendations to KMA as appropriate.

I appreciate the continuing interest, enthusiasm and participation of the members of the Committee. The issues facing medicine are complex, and your Committee has demonstrated a tenacious determination in its attempt to represent the membership in developing ideas that will help our colleagues become better prepared to meet those challenges.

**Nelson B. Rue, MD**  
Chairman

Name	Commenced Business	Enrollment as of 3/31/87	Enrollment as of 12/31/86
Choice of Care of Kentucky, Inc.	2/8/85	7,605	8,203
**HealthAmerica of Covington, Inc.	NR	1,094	855
**HealthAmerica of Kentucky, Inc.	4/1/81	59,427	59,888
HealthWise of Kentucky, Ltd.	5/1/86	3,535	1,894
HMO Kentucky, Inc.	1/1/86	22,436	11,301
Humana Health Plan, Inc.	9/23/83	135,454	138,477
**Independence Health Plan of Kentucky	1/1/85	19,747	7,665
**MaxiCare of Ohio, Inc.	NR	3,892	3,741
MediPlan HMO, Inc.	"Inactive"		
MetLife Health Care Network of Kentucky, Inc.	12/27/85	15,389	12,589
Mountain Trails Health Plan, Inc.	9/73	17,129	16,305
Partners In Health Maintenance	6/15/86	9,973	7,519
Peak Health Plan of Ohio	1/1/85	13,692	11,446
Prudential Health Care Plan, Inc. (dba PruCare)	"Inactive"		
Southeastern Medical Group (Option 2000)	12/18/85	129,324	103,407

\*NR = Not Reported

PC = Primary Care

Sp = Specialists

\*\*HealthAmerica of Kentucky and Independence have emerged and are now MaxiCare of Kentucky. Therefore, figures for these two plans are for the period ending 9/30/86.

HealthAmerica of Ohio has taken over HealthAmerica of Covington and MaxiCare of Ohio, so figures for these two plans are also for the period ending 9/30/86.



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Ambulatory Physician Encounters	Hospital Days/1000	Average Length of Stay	Net Income (Loss) as of 3/31/87	Net Income (Loss) Previous Yr.	Current # Participating Physicians
12,036	469	3.93	(138,628)	(1,045,104)	300 (PC & Sp.)
NR	400	4.0	(44,820)	-0-	NR
165,220	279	3.7	(3,317,960)	3,873,502	37 (PC)
1,597	30.8	3.98	8,280	(207,065)	350 (PC & Sp)
22,334	522	5.04	(1,350,962)	(3,194,248)	333 (PC)
87,113	605	5.4	1,721,826	4,802,104	Unlimited
47,148	300	3.2	(460,638)	(1,361,080)	300 (PC)
2,856	411	3.0	(37,911)	(178,624)	NR
12,559	542	5.2	(664,501)	(2,444,483)	1,200 (PC & Sp)
16,969	822	4.6	(2,978,034)	(1,636,036)	160 (PC)
8,018	633	5	(389,465)	(834,026)	600 (PC & Sp)
11,399	302	3.9	(215,729)	(1,863,442)	150 (PC)
145,037	183.92	5.46	(4,920,334)	(8,658,985)	All physicians with BC/BS Participating Agreements

### Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next reviewed Report No. 31, Report of the Committee to Investigate Changing Trends in Medicine. The Committee would like to commend this Committee on its work in the development of the data file on alternate delivery systems and its timely distribution to the membership of the Association. Reference Committee No. 4 would like to commend the Committee on its work in implementation of Resolution Q (1986) and encourages the Committee to continue to research the areas of preventing administrative pressure to ration care, contracting guides, contract review services, the problem data bank, and patient education to provide expanded resources in these areas for use by the members of the Association. The Reference Committee recommends that Report No. 31 be adopted.

### Resolution H Jefferson County Medical Society Trustee District Peer Review Appeals

WHEREAS, the peer review process was initiated to allow input from physicians and insurance carriers regarding discrepancies of fact or opinion regarding payment mechanisms, quality, and appropriateness of care, and

WHEREAS, recommendations of various Trustee District peer review committees may be appealed to the KMA Claims and Utilization Review Committee (CURC), and

WHEREAS, it is apparent that an appeals process to the KMA CURC is necessary and, at the same time, it is also apparent that such an appeals process should have some basis in fact for hearing an appeal of a peer review committee's recommendation, and

WHEREAS, the ability of insurance carriers to appeal local recommendations for further review by the KMA has resulted in double jeopardy on the part of many physicians, and

WHEREAS, the routine appeal of the good faith peer review recommendations of Trustee District and county medical society peer review committees defeats the entire purpose of peer review and is detrimental to the morale of those physicians who have donated their time to appropriately address such issues as peer review committee members, now therefore be it

RESOLVED, that the Kentucky Medical Association reaffirm the joint privilege of physicians and insurers alike for an appeal mechanism to the KMA Claims and Utilization Review Committee, and be it further

RESOLVED, that peer review cases appealed to the KMA CURC must contain a written justification, such as error, omission of essential facts, local bias, or errors of judgment making such an appeal necessary, and be it further

RESOLVED, that such written justification be reviewed by the CURC prior to hearing the case on appeal, and that such a hearing take place only if a majority of Committee members agree that the written justification establishes a reasonable belief that the peer review committee recommendation was made inappropriately.

### Recommendations, Reference Committee No. 4:

Reference Committee No. 4 next heard testimony on Resolution H, Trustee District Peer Review Appeals, submitted by the Jefferson County Medical Society. Reference Committee No. 4 feels that the proposed changes in the appeal mechanism would unnecessarily complicate the appeals process from the appeals committee standpoint. These changes would also potentially unduly restrict the physi-

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cian's opportunity to appeal to a higher level of his peers. The Committee recommends that Resolution H be rejected.

### **Resolution I Jefferson County Medical Society Medical Care Review**

WHEREAS, the current KMA Claims and Utilization Review Committee does not separate medical and surgical review processes, and

WHEREAS, there are many cases which involve separate surgical or medical specialties, and

WHEREAS, these are best dealt with on a specialty-wide basis, rather than a medical basis, now therefore be it

RESOLVED, that the KMA Board of Delegates instruct the KMA Board of Trustees to change the Claims and Utilization Review Committee of the Kentucky Medical Association into two committees, one dealing with medical cases and one dealing with surgical cases.

### **Recommendations, Reference Committee No. 4:**

Reference Committee No. 4 next heard testimony on Resolution I, Medical Care Review, submitted by the Jefferson County Medical Society. The Committee feels that there is already a balance of medical and surgical expertise on the review board and at this time there is no need to divide the medical and surgical cases. Reference Committee No. 4 recommends that Resolution I be rejected.

### **Resolution J Jefferson County Medical Society Managed-Care Plans**

WHEREAS, the citizens of Kentucky are faced with an increasing number of choices regarding health insurance plans, and

WHEREAS, employers are often confused by the differences in cost, which are overtly advertised with minimal differences in coverage disclosed, and

WHEREAS, patients often discover the drawbacks of so-called managed-care plans only after requiring care and being enrolled, and

WHEREAS, current marketing techniques of insurance carriers do not disclose shortcomings of plans compared to traditional types of insurance coverage, and

WHEREAS, insurance carriers do not point out that the contract for insurance is between the patient and the insurance carrier, rather than between the physician and the insurance carrier, and

WHEREAS, insurance carriers are increasingly interfering with the patient/physician covenant, and

WHEREAS, in some instances, this is demonstrated to be not in the best interests of quality of care of the patients, now therefore be it

RESOLVED, that the Kentucky Medical Association petition the State Legislature and the Kentucky Commissioner of Insurance to require that health insurers fully disclose to prospective purchasers any and all provisions restricting the patient's freedom of choice of hospitals, physicians, treatment modalities, or otherwise imposing responsibilities for managed care into the patient/physician relationship, and be it further

RESOLVED, that patients who have not documented their informed consent to such managed-care restrictions be relieved of contractual responsibilities for such restrictions, and that the patient and any health care providers involved be held harmless from the terms of such restrictions.

### **Recommendations, Reference Committee No. 4:**

Reference Committee No. 4 next considered Resolution J, Managed-Care Plans, submitted by the Jefferson County Medical Society. A representative of the KMA Board of Trustees was present and offered the following substitute Resolution, which the Committee also considered:

**"RESOLVED, that some of these frustrations with managed health care plans, generated by the following, be communicated to the Insurance Commissioner:**

- 1. The citizens of Kentucky are faced with an increasing number of choices regarding health insurance plans, and**
- 2. Employers are often confused by the differences in cost, which are overtly advertised with minimal differences in coverage disclosed, and**
- 3. Patients often discover the drawbacks of so-called managed-care plans only after requiring care and being enrolled, and**
- 4. Current marketing techniques of insurance carriers do not disclose shortcomings of plans compared to traditional types of insurance coverage, and**
- 5. Insurance carriers do not point out that the contract for insurance is between the patient and the insurance carrier, rather than between the physician and the insurance carrier, and**
- 6. Insurance carriers are increasingly interfering with the patient/physician covenant, and**
- 7. In some instances, this is demonstrated to be not in the best interests of quality of care of the patient, and be it further**

**RESOLVED, that it is to everyone's advantage for quality medical care to be delivered to the citizens of**



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this state without the existing, but needless, confusion now enveloping the public, and be it further

**RESOLVED**, that the Kentucky Department of Insurance is the most pertinent governmental agency to remedy this problem by mandating a requirement that health insurers fully disclose to prospective purchasers any and all provisions restricting the patient's freedom of choice of hospitals, physicians, treatment modalities, or otherwise imposing responsibilities for managed care into the patient/physician relationship, and be it further

**RESOLVED**, that patients and physicians should not be held responsible for any such restrictions unless they have documented their informed consent, and be it further

**RESOLVED**, that the Kentucky Medical Association petition the Commissioner of Insurance, through the Department of Insurance (and/or other agencies available), to initiate such regulations, legislation, or utilize whatever means is available to eliminate the confusion created by health insurers by imposing appropriate rules and regulations to overcome those problems delineated in this Resolution and thus enable the citizens of Kentucky to understand their health care coverage and receive the quality medical care they deserve.

Reference Committee No. 4 feels that Substitute Resolution J more clearly defines the issues addressed and also clarifies direction of referral for this information. Reference Committee No. 4 recommends adoption of Substitute Resolution J in lieu of Resolution J.

The motion was seconded from the floor. A motion was then made from the floor that Substitute Resolution J as proposed by the Reference Committee be further amended by addition of a final Resolved, to read:

**RESOLVED**, that third-party payors may not require patients to leave their local community to seek medical care in order to receive benefits.

The motion was seconded and carried; Substitute Resolution J was adopted as amended from the floor.

### **Resolution V** **Jefferson County Medical Society** **Third-Party Encumbrances**

WHEREAS, third parties are requiring more and more information to certify medical necessity for reimbursement of patients for durable medical equipment, and

WHEREAS, this trend is putting a greater workload on physicians to complete these forms, even though the durable goods in question may have been ordered by a home

health nurse, physical therapist or other person involved in the patient's care, and

WHEREAS, some third parties make the forms and certification requirements so unnecessarily complex that they tend to discourage physicians' completion and signature, thereby denying patients their reimbursement for necessary durable medical equipment, now therefore be it

**RESOLVED**, that the Kentucky Medical Association propose, and work through the American Medical Association as appropriate, to effect changes in third-party reimbursement requirements so that a physician's prescription can be universally accepted as adequate certification of medical necessity for durable medical equipment, and be it further

**RESOLVED**, that if a physician's prescription for durable medical equipment cannot be so accepted by third parties, KMA use appropriate means to encourage the development of a simple, standardized form for certification of medical necessity of durable medical equipment.

### **Recommendations, Reference Committee No. 4:**

Reference Committee No. 4 next heard discussion on Resolution V, Third-Party Encumbrances, submitted by the Jefferson County Medical Society. The Committee felt that it was appropriate to strike the last half of the second "Whereas." The amended second "whereas" would then read:

**"WHEREAS, this trend is putting a greater workload on physicians to complete these forms, [even though the durable goods in question may have been ordered by a home health nurse, physical therapist, or other person involved in the patient's care], and"**  
Reference Committee No. 4 recommends adoption of Resolution V.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 4 as a whole as amended.

I would sincerely like to thank the other members of the Committee: Bill H. Harris, MD, Lexington; Martha Keeney Heyburn, MD, Louisville; Emmanuel J. Battah, MD, Hopkinsville; and N. H. Talley, MD, Princeton, for their work. I would also like to thank Martha Coombs for her assistance in the preparation of this Report.

### **REFERENCE COMMITTEE NO. 4**

**Mark F. Pelstring, MD, Covington, Chairman**  
**Bill H. Harris, MD, Lexington**  
**Martha Keeney Heyburn, MD, Louisville**  
**Emmanuel J. Battah, MD, Hopkinsville**  
**N. H. Talley, MD, Princeton**

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*Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.*

## REPORT OF REFERENCE COMMITTEE NO. 5

**Ardis D. Hoven, MD, Chairman**

Reference Committee No. 5 considered the following Reports and Resolutions:

- 32. Report of the Committee on Maternal and Child Health
- 33. Report of the Committee on Medicare and Other Governmental Medical Programs
- 34. Report of the Committee on Health Planning
- 35. Report of the Technical Advisory Committee on Physician Services
- 36. Report of the Committee on Community and Rural Health
- 37. Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports
- 38. Report of the Subcommittee on Youth Education
- 39. Report of the Advisory Committee to CHR
- 5. Report of the Chairman, Board of Trustees, Report of the Ad Hoc Committee on Development of AIDS Guidelines, **only**
  - Resolution B — Peerview Oversight Committee (Board of Trustees)
  - Resolution Q — Medicare Suspect Classification by KMAP (Fayette County Medical Society)
  - Resolution S — Reportability of Communicable Diseases (Jefferson County Medical Society)
  - Resolution T — Communicable Disease Screening (Jefferson County Medical Society)
  - Resolution W — Medicare Assignment (Board of Trustees)
  - Resolution X — Medical Services for the Elderly and Indigent (Board of Trustees)
  - Resolution Y — Medicare Denial of Payment Notification (Board of Trustees)
  - Resolution Z — Medicare Outpatient Services (Board of Trustees)

### ITEMS FOR CONSENT

Reference Committee No. 5 reviewed the following items and recommends they be filed as indicated, by the consent of the House, without discussion:

- 33. Report of the Committee on Medicare and Other Governmental Medical Programs — filed
- 34. Report of the Committee on Health Planning — filed
- 35. Report of the Technical Advisory Committee on Physician Services — filed
- 36. Report of the Committee on Community and Rural Health — filed
- 38. Report of the Subcommittee on Youth Education — filed
- 39. Report of the Advisory Committee to CHR — filed

### Report of the Committee on Medicare and Other Governmental Medical Programs

The Committee on Medicare and Other Governmental Medical Programs shares with all physicians a continued and growing frustration with the Medicare Program. As all are aware, Medicare is the focus of a Congressional dilemma of social obligation as opposed to budget deficits.

As an entitlement program, Medicare is required to provide services for eligible recipients. As more citizens become eligible for the program, and for longer periods of time, obviously, expenditures will increase. Aided by inflation and technology, costs have reached a point which threatens Medicare solvency. An obvious—and easy—solution is to reduce reimbursement to providers. Because physicians are reimbursed statutorily on a fee-for-service basis, physician reimbursement is a ready target for costs.

Physicians saw the calendar year begin with reaffirmation of the participating physician agreement. The choice to participate was clouded by a lack of information concerning charge profiles, which were to be made available by carriers. Because carriers could not respond with that information by the deadline for signing a participating agreement, many physicians were left in a quandary. Nationwide, the physician rate of participation was between 26% and 32%. Currently, Kentucky's physician rate of participation is approximately 30%, although over 70% of all claims submitted by Kentucky physicians are on an assignment basis.

Throughout the year, physicians continued to grapple with the problem of determining maximum allowable actual charges (MAAC), with many glaring questions unanswerable. There were no fees profiled for physicians not in practice during the base period for determining fees (April through June 1984). Some physicians did not perform various routine procedures during the base period, so had no fee profiles. New procedures have developed since the base period for which there are no profiles. Information finally



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submitted by carriers was often erroneous, and physicians were threatened with penalties for noncompliance.

In the face of these problems, the AMA and KMA continue to work diligently, not only with the Health Care Financing Administration, but with carriers, to try to address these issues. Simultaneously, efforts were made in Congress and through the Administration to change many of the onerous provisions imposed, and the AMA sought an injunction to postpone these measures, which failed, and continues to pursue legal recourse through the courts. Most recently, the AMA is seeking to amend the Budget Reconciliation Act of FY 1988 to ameliorate the MAAC provisions and the participating physicians portions of the law.

Another provision has been the proposal to increase payments to both participating and nonparticipating physicians, but at different rates. Increases are to be based on the medical economic index (MEI) and, presently, the increase in January 1988 is predicted to be 2% for participating and 1% for nonparticipating physicians. The MEI is obviously not only discriminatory, but inadequate, because it is essentially based on 1973 prevailing charge levels. An obvious result is fewer participating physicians and fewer assigned claims.

A further onerous provision of the program has been the use of "inherent reasonableness" to modify current payment levels for specific procedures. Proponents of this measure substantiate its use by declaring that certain procedures are overused, while others are overpriced because of new technology and streamlined medical processes. Conversely, physicians have felt that many Medicare payments were inordinately low, particularly for primary care in rural areas. Procedures targeted for cuts were cataract removal, hip replacement, coronary bypass, and prostatectomy.

The "inherent reasonableness" concept is seen as merely a further means to make piecemeal budget cuts, because payment levels have never clearly been shown to be higher for Medicare than for other programs. Finally, sole authority for determining "inherent reasonableness" has been left with the Secretary of Health and Human Services, rather than through the traditional regulatory process.

While specific reimbursement reductions have been targeted and others have been made, Congressional intent has been to simultaneously attempt to influence physicians to become formal participants in the interest of cost reductions. Participating physicians are not restricted with regard to the amount they may charge. Even though they are not reimbursed at a significantly higher rate, their higher charges are used in making update calculations.

Participating physicians are listed in a directory. Beginning in October 1987, when referring patients to a nonparticipating physician, hospital personnel will be required to

inform patients of the name of a "qualified" participating physician. Carriers will be required to process participating physicians' claims faster than those for physicians who do not participate. Beneficiaries will be reminded of the participating physician program on society security check mailings and Medicare claim forms.

Beginning in October, nonparticipating physicians who perform surgical procedures which will be charged at a rate higher than \$500 must so inform the patient, as well as advise of the amount Medicare will reimburse, and the difference the patient will be required to pay. Also beginning in October, if a service performed by a nonparticipating physician is determined by a carrier or peer review organization to be medically unnecessary, the physician will have to refund the charge to the beneficiary.

In line with these measures has been the ongoing discussion of reimbursing physicians on the basis of diagnosis related groups (DRGs). As discussed elsewhere, the medical federation has been successful in influencing this view, although the Administration remains committed to paying radiologists, anesthesiologists, and pathologists on a DRG basis. Hopefully, the AMA-sponsored House Concurrent Resolution 30 and Senate Concurrent Resolution 15 will prevent this measure from being enacted during this session of Congress, but the issue is certainly not moribund.

A further programmatic concern which will affect physicians is the possible enactment of catastrophic coverage for Medicare recipients, which is receiving serious discussion. Given the fact that the Medicare Program, as currently operated, faces a bleak future financially, one must question the logic of adding a catastrophic component. As first mentioned, Medicare is an entitlement or, rather, "all or nothing" program. Once a person becomes categorically eligible for Medicare, that person is entitled to all of the benefits established. Inclusion of a catastrophic provision merely adds another benefit, from a crass economic standpoint.

As has been seen with the State Medicaid Program, expenditures will obviously increase with the enactment of catastrophic coverage. The guarantee of coverage to the Medicare beneficiary becomes, then, a commitment, whereas reimbursement for providers of service under that coverage is merely an obligation, and it is likely that provider reimbursement will only suffer further.

While many of the changes that have been witnessed in the Program this year are negative, it is, at the same time, gratifying that other intolerable provisions have been defeated, thanks to the efforts of individual physicians, contacts with carriers and administrative agencies and, primarily, through our national legislative efforts. The coming year promises to be equally harried. As seen by the rate of assigned claims of Kentucky physicians, though, the profes-

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sion obviously continues to provide necessary care, regardless of the inequities and restrictions of Medicare, and all physicians are urged to continue this tradition.

**Ardis D. Hoven, MD**  
Chairman

### **Report of the Committee on Health Planning**

The Committee on Health Planning did not meet during this Associational year. As noted in last year's report, the Federal law establishing the health planning process was due to expire in 1986. That, in fact, became reality with no proposal being introduced to extend health planning and Federal funding to the states beyond the September 1986 expiration date.

As this report is being written, a recommendation has been submitted to the Board of Trustees that the Committee on Health Planning be deleted due to lack of funding for health planning activities. It has further been recommended to the Board that any matters which would, in the course of time, have been referred to the Health Planning Committee, be shifted to other KMA committees as appropriate. It is anticipated that the Board will accept these recommendations, and this will be the last report of the Committee.

Should the need arise at some future date to reactivate the Committee on Health Planning, the members of this Committee will stand ready to resume their duties. With this in mind, I would like to take this opportunity to express to the members of the Committee my appreciation for their service to the Association.

**Frederick A. Stine, MD**  
Chairman

### **Report of the Technical Advisory Committee on Physician Services (Title XIX)**

The KMA Technical Advisory Committee on Physician Services continued to represent physicians and the Association to the Medical Assistance Advisory Council this year through informal discussions and at quarterly meetings of the Council.

The Committee is pleased to note the appointment of William T. Watkins, MD, Somerset, who serves as the KMA representative on the Council. Doctor Watkins replaces Robert N. McLeod, Jr, MD, who retired after many years of faithful service. Doctor Watkins has been an able spokesman for the profession and the indigent.

The Committee represented individual physicians to the Medicaid Program on a variety of items, which included claims processing and coding problems, reimbursement for in-office laboratory procedures, preauthorization and Drug Formulary concerns, and other inequities. Two major concerns the Committee noted this year related to physician liability and the overall level of care provided to the medically indigent in the state.

KMA, as well as other provider groups, have voiced concerns about liability problems, particularly as they relate to the level of reimbursement made by Medicaid. Acknowledging that this problem is most crucial for family physicians who practice obstetrics and other providers who are involved in prenatal and obstetrical care, the Council and Program representatives agreed that some immediate steps should be taken.

Early in the year the Department for Medicaid Services had unilaterally raised reimbursement for normal obstetrical deliveries from \$125 to \$250 and, commensurately, for other categories of deliveries. However, the reimbursement figure remained inadequate in terms of insurance premium rates family practitioners were forced to pay, assuming that insurance coverage was available. The same influence was felt by obstetricians who, in some instances, had been able to assimilate Medicaid patients into their overall patient loads, but because of the liability pressures they are experiencing, are no longer able to do so. While Council members, the Department, and the Cabinet for Human Resources were sympathetic to these current concerns, it was agreed that there were few avenues available within the Program to resolve the related problems.

Because of an ongoing concern with indigent care among all provider groups, the Cabinet, the Legislature, and the general public, the Committee directed some of its observations to the overall influence of Medicaid. To suit indigent care concerns, obviously the Medicaid Program should be expanded as much as possible, but Program expansion bears a direct relationship to the amount of State finances that are available for Medicaid. In each state, Federal monies are paid into Medicaid based on a formula with two essential components. The first component is the per capita income of the state's population, and the second is the relative amount of State money devoted to Medicaid.

The Federal matching formula for Kentucky is approximately 3½ to one (71%/29%). The amount of State money applied to Medicaid is based on approximately 38% of the Federal poverty level. Because of the provisions of the original statute, funds spent by Medicaid per capita cannot exceed the amount of money given to welfare recipients who receive direct cash assistance. Therefore, to expand either the level of reimbursement or eligibility under Medicaid



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would require an equal amount of money being devoted from State funds to welfare cash assistance. Given the larger indigent care problem, it would appear that expansion of eligibility should receive priority if commensurate funds could be supplied to the cash assistance program. Given these restrictions, expansion of the Medicaid Program is not likely.

Ironically, the existence of Medicaid has increased the problem of medical indigence. Medicaid eligibility categories make Medicaid an "all or nothing" program. Eligibility is based on individual income of 38% of the Federal poverty level, and recipients must either be single or from families that are not intact. Any person who does not meet these criteria is not eligible. The Medicaid Program suffers from a number of significant inadequacies and the overall program, itself, does not meet the state's indigent care needs.

The KenPAC Program, which is far from ideal, does seem to be a reasonable attempt to make the most prudent use of Medicaid dollars. It does channel the bulk of Medicaid monies into the area of need for the greatest number of recipients—primary care. The Committee has requested that the Council provide a detailed analysis of the effectiveness of KenPAC now that it has operated more than one year. Such information should be interesting.

The Council has appointed a Program Projections Subcommittee this year, to which the physician TAC has presented testimony. In previous years this Subcommittee has been a forum for determining budget cuts. This year the Subcommittee has acted more in the role of a policy advisor, although, ultimately, budget cuts are predicted.

The physician TAC addressed recommendations and concerns to the Subcommittee. The priority issue the TAC recommended to the Subcommittee was an attempt to resolve the maternal and child care crisis. The second priority that the TAC expressed related to provider reimbursement. Fewer and fewer providers, not just physicians, are participating in Medicaid because of low reimbursement levels. As physicians have expressed for many years, the reimbursement made by Medicaid does not cover the cost of operation. Not only are fewer and fewer Medicaid recipients being treated, but patients who are otherwise medically indigent who do not qualify for Medicaid are suffering from a lack of availability of care.

Changes in Federal budget legislation the last two years have allowed states to obtain waivers to modify their Medicaid programs to include more mothers and young children for coverage. To participate in this, states must provide their share of matching monies, and the committee recommended that funds be allocated for this new category.

The Committee recommended that the Subcommittee and the Medical Assistance Advisory Council urge legislation

that would place State Medical monies in a nontransferable account. On at least two occasions in the past when there was an excess of Medicaid monies at the end of the fiscal year, instead of these monies being returned to the Medicaid Program, they were devoted to other areas of shortfall within the State budget. From the standpoint of medical care, this was illogical because for every State dollar put into the Program, three Federal dollars are matched. If the Medicaid budget becomes nontransferable, any savings will be enhanced rather than lost.

Finally, the Committee urged that the Subcommittee and the Council give attention to the disease of AIDS and patients afflicted with the disease. It was pointed out that there has been a geometric growth in the number of AIDS patients in the state and elsewhere and that, probably, many of these patients are Medicaid-eligible. While the drain on the Medicaid budget for treatment of these patients may not be significant now, that situation could dramatically change and should be anticipated.

The Technical Advisory Committee shares the frustration of all the State's physicians with the problems associated with Medicaid, but would only point out that it is part of the larger problem of indigent medical care that will undoubtedly receive legislative attention in 1988. The Committee would urge any comments, recommendations, or requests from the membership.

**Harold L. Bushey, MD**  
Chairman

### **Report of the Committee on Community and Rural Health**

The Committee on Community and Rural Health had one formal meeting during the 1986–87 Associational Year. The Committee reviewed several matters that specifically relate to rural areas. The Committee noted that the Rural Kentucky Medical Scholarship Fund, through a pilot program, is now promoting the establishment of practice in rural areas by providing funds for practice start-up costs. The Committee believes this to be an important step that will, in the long run, be very beneficial to rural areas.

Once again, the Committee addressed the crisis in established (OB) care in rural areas brought about by the malpractice crisis. An acute shortage exists of physicians in rural areas who do deliveries, and physicians are dropping OB from their practice at alarming rates. The Committee noted that the KMA Committee on Maternal and Child Health is addressing this problem and will leave recommendations to this Committee.

According to Cabinet for Human Resources (CHR) representatives, physicians in general are not accepting Med-

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icaid OB patients who live outside their county and a serious problem exists in several areas for patients needing prenatal care.

The high rate of teenage pregnancies, particularly white teenage pregnancies, was discussed. According to CHR spokesmen, several studies are underway to seek the cause of the high rate in Kentucky, but at this point it has not been clearly defined.

CHR representatives discussed the results of the 1986-87 public and private school immunization survey of kindergarten students throughout Kentucky. The results of that survey are:

Total kindergarten enrollees	48,217
Percentage fully immunized	93.7%
Percentage with religious or medical exemptions on file	3.7%
Percentage without valid certificates or exemptions	2.6%

Of the immunizations given, 57% were given by the health department and 43% were given by the private sector.

During the year, the Committee maintained its interest in alleviating child abuse and neglect. A brochure developed by the Committee, which identifies abuse and teaches in lay persons' language how to spot specific abuses, continues to be printed and mailed from KMA. Every school in Kentucky received a copy of the brochure in 1986, and another copy, along with a letter of explanation, will be mailed again in 1987. In addition, we have received numerous requests for the brochures and have authorized other out-of-state groups to utilize its contents with changes in toll-free numbers, etc. KMA has received much publicity as a result, and we are recognized as a major party in promoting safety for children.

On behalf of the Committee, we appreciate the opportunity to participate in Association Committee activities and to be of service to our members.

**Don R. Stephens, MD**  
Chairman

### Report of the Subcommittee on Youth Education

As reported to you previously, the Subcommittee on Youth Education has developed a drug and alcohol interdiction program with focus on self-esteem. To be effectively presented, the program will require the purchase or printing of a considerable amount of material.

Members of the Subcommittee on Youth Education, working with the Committee on School Health, Physical

Education and Medical Aspects of Sports, have been seeking funds for this project but, unfortunately, the demand for funding of many worthwhile projects has taken a toll on the availability of such funds. As a result, it may be some time before monies become available for this project.

With that in mind, we are requesting that the Subcommittee on Youth Education not be reappointed until funding for the program becomes available. At that time, the Committee on School Health, Physical Education and Medical Aspects of Sports will request that KMA Officers reappoint the Subcommittee.

**R. Quin Bailey, MD**  
Chairman

### Report of the Advisory Committee to CHR

The Advisory Committee to the Cabinet for Human Resources (CHR) was appointed to communicate directly with the Secretary on issues of an urgent nature or matters that require informal discussion but are of enough significance that any resulting policy would have a broad impact on the practice of medicine.

This year the Committee met with the Secretary, the Commissioner of the Department for Medicaid Services, and other staff members to discuss indigent care issues. Primarily, talks centered on the crisis in maternal and child care. The growing liability problem had resulted in a lack of prenatal and obstetrical care provided by family physicians and also caused a definite trend toward a reduction in services provided by obstetricians to Medicaid recipients. Meeting with the group were representatives of the Kentucky OB-GYN community.

Everyone associated with the issue was in agreement about the critical state of maternal and child care, and it was noted that some increased funding had been made available. However, even if available funding were doubled, it is not likely that this would constitute a sufficient inducement for more obstetricians to participate in Medicaid, because this level of financing still would not relieve the individual obstetrician's liability concerns. Talks on this issue are continuing with the Secretary and other representatives in State government. In any dialogue that takes place administratively or legislatively, maternal and child care will certainly be a KMA priority.

From the KMA perspective, it would be difficult to encourage the State to single out a given specialty for preferential treatment. However, in the case of maternal and child care, special attention is appropriate. With one of the highest infant mortality rates and the highest incidence of



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white teenage pregnancies in the nation, the Commonwealth simply must provide some immediate and effective relief. KMA representatives are pursuing such relief through ongoing discussions with the Secretary, directly through the Medicaid Program, and through discussions on indigent care with the Legislature.

**Nelson B. Rue, MD**  
Chairman

### END OF CONSENT CALENDAR ITEMS

#### **Report of the Maternal and Child Health Committee**

The Maternal and Child Health Committee met on May 21, 1987, and discussed the recommendations made by the Committee to the 1986 House of Delegates, which were approved. A review of the progress of those recommendations was conducted.

In regard to the recommendation that KMA support sex education in the schools, beginning in grades five through seven, letters have been written to the Superintendent of Public Instruction and the Chairman of the State Board of Education. A response was received from the Department of Education noting that the Department, too, has identified teenage pregnancy as a major concern and that the Department's Health Education Consultant, Gene Fitzhugh, will be working with a committee to look into this problem in detail. The Chairman of the KMA Maternal and Child Health Committee has been in contact with Mr. Fitzhugh to discuss this matter and has provided some information on a West Virginia state-mandated sex education program. The Committee stands ready to provide whatever assistance possible to the State, including the availability of consultants, in seeing that appropriate sex education programs are developed.

Several of the Committee members have been active in promoting sex education programs in their communities, and the Committee members feel it is important for all physicians and the KMA Auxiliary members to be involved. The Committee on Maternal and Child Health, therefore, encourages local medical societies and local Auxiliary members to become active in local sex education programs.

In regard to the recommendation for expanded funding by the Cabinet for Human Resources for obstetrical indigent care, a meeting was held with the Secretary for Human Resources to discuss this matter. It was noted at that meeting that the State would be willing to increase compensation for Medicaid deliveries if they had the funds. It was ex-

plained, however, that if additional money was found to increase reimbursement for obstetrical services in 1987-88, it will be some time before this could be done again, for reimbursement levels for other services would have to be allowed to catch up. As of July 1, 1987, State general revenues decreased, and the Medicaid Program saw a 5% reduction in funding across the board.

The Maternal and Child Health Committee had suggested that KMA recommend to third-party carriers that appropriate compensation flow to physicians who are in attendance at high-risk deliveries, including all cesarean sections. The 1986 House also adopted this recommendation. A letter was written to Blue Cross and Blue Shield, the largest carrier, requesting a review of the reimbursement policies for physicians in attendance at high-risk deliveries.

Blue Cross and Blue Shield has responded that attendance at high-risk C-section deliveries by pediatricians is covered in cases that require treatment of a critical illness. Primarily, those would include respiratory distress syndrome, cardiac difficulties, and congenital anomalies. An "attendance charge" is allowed in addition to any charge made for additional services rendered by the pediatrician, such as resuscitation and ICU visits. For those children who are born with medical problems, Blue Cross and Blue Shield provides full contract benefits for any medically necessary services rendered by a physician. Benefits are not provided, however, for "stand-by" charges by the pediatrician for a normal obstetrical delivery that does not meet the above criteria.

The Maternal and Child Health Committee had also suggested that KMA recommend to the University of Kentucky that it investigate the problem of the maternal transport program for its region and establish a strong perinatal program, in view of the fact that UK does not have an existing maternal transport program. The University of Kentucky has a new Director of its Maternal and Fetal Medicine Program, and the Chairman has spoken with him regarding this recommendation. The Director is actively involved in strengthening UK's high-risk obstetrical service and is interested in a maternal transport program for UK, but has not, at the time of this writing, had a chance to pursue this. The Committee will continue to monitor this area of concern.

The Registrar of Vital Statistics for the Cabinet for Human Resources presented a US standard birth certificate to KMA and asked for comments. This matter was referred to the Maternal and Child Health Committee. The form, being considered for introduction in Kentucky on January 1, 1988, is divided into three parts. The first and second portions relate specifically to information which appears on the certificate currently in use and is not in question; the third

FORM VS NO. 2-A  
(Rev. 9/87)

TYPE/PRINT  
IN  
PERMANENT  
BLACK INK  
FOR  
INSTRUCTIONS  
SEE  
HANDBOOK

CHILD

MOTHER

FATHER

INFORMANT

CERTIFIER/  
ATTENDANT

DEATH UNDER  
ONE YEAR OF  
AGE  
Enter State File  
Number of death  
certificate for  
this child.

MOTHER

FATHER

MULTIPLE BIRTHS  
Enter State File  
Number for Most/L  
LIVE BIRTH(S)

FETAL DEATH(S)

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT FOR HEALTH SERVICES  
REGISTRAR OF VITAL STATISTICS  
CERTIFICATE OF LIVE BIRTH

Registration District No. \_\_\_\_\_ Primary Registration District No. \_\_\_\_\_

FILE NO. 116 \_\_\_\_\_  
REGISTRAR'S NO. \_\_\_\_\_

1 CHILD'S NAME (First, Middle, Last) \_\_\_\_\_ 2 DATE OF BIRTH (Month, Day, Year) \_\_\_\_\_ 3 TIME OF BIRTH \_\_\_\_\_ M

4 SEX \_\_\_\_\_ 5 CITY, TOWN, OR LOCATION OF BIRTH \_\_\_\_\_ 6 COUNTY OF BIRTH \_\_\_\_\_

7 PLACE OF BIRTH: ☐ Hospital ☐ Freestanding Birthing Center  
☐ Clinic/Doctor's Office ☐ Residence  
☐ Other (Specify) \_\_\_\_\_

8 FACILITY NAME (If not institution, give street and number) \_\_\_\_\_

9 MOTHER'S MAIDEN NAME \_\_\_\_\_ 10 SOCIAL SECURITY NUMBER \_\_\_\_\_ 11 AGE (At time of this Birth) \_\_\_\_\_

12 BIRTHPLACE (State or Foreign Country) \_\_\_\_\_ 13a RESIDENCE-STATE \_\_\_\_\_ 13b COUNTY \_\_\_\_\_ 13c CITY, TOWN OR LOCATION \_\_\_\_\_

13d STREET AND NUMBER \_\_\_\_\_ 13e INSIDE CITY LIMITS? (Yes or No) \_\_\_\_\_ 13f MOTHER'S MAILING ADDRESS (If same as residence, enter Zip Code only) \_\_\_\_\_

14 FATHER'S NAME (First, Middle, Last) \_\_\_\_\_ 15 SOCIAL SECURITY NUMBER \_\_\_\_\_ 16 AGE (At time of this Birth) \_\_\_\_\_ 17 BIRTHPLACE (State or Foreign Country) \_\_\_\_\_

18 I certify that the personal information provided on this certificate is correct to the best of my knowledge and belief.  
Signature of Parent or Other Informant \_\_\_\_\_

19 I certify that this child was born alive at the place and time and on the date stated  
Signature \_\_\_\_\_

20 DATE SIGNED (Month, Day, Year) \_\_\_\_\_

21 CERTIFIER'S NAME AND TITLE (Type/Print)  
Name \_\_\_\_\_  
☐ M.D. ☐ D.O. ☐ Hospital Admin. ☐ C.N.M. ☐ Other Midwife  
☐ Other (Specify) \_\_\_\_\_

22 ATTENDANT'S MAILING ADDRESS (Street and Number or Rural Route Number  
City or Town, State, Zip Code) \_\_\_\_\_

23 REGISTRAR'S SIGNATURE \_\_\_\_\_ 24 DATE FILED BY REGISTRAR (Month, Day, Year) \_\_\_\_\_

INFORMATION FOR MEDICAL AND HEALTH USE ONLY

25 OF HISPANIC ORIGIN? (Specify No or Yes - If yes, specify Cuban, Mexican, Puerto Rican, etc.) \_\_\_\_\_ 26 RACE - American Indian, Black, White, etc. (Specify below) \_\_\_\_\_ 27 Education (Specify only highest grade completed)  
Elementary/Secondary (0-12) \_\_\_\_\_ College (14 or 5+) \_\_\_\_\_

25a ☐ No ☐ Yes  
Specify: \_\_\_\_\_

26a \_\_\_\_\_

25b ☐ No ☐ Yes  
Specify: \_\_\_\_\_

26b \_\_\_\_\_

27b \_\_\_\_\_

28 PREGNANCY HISTORY (Complete each section)  
LIVE BIRTHS (Do not include this child) OTHER TERMINATIONS (Spontaneous and induced at any time after conception)  
28a. Now Living Number \_\_\_\_\_ 28b. Now Dead Number \_\_\_\_\_ 28c. DATE OF LAST LIVE BIRTH (Month, Year) \_\_\_\_\_ 28d. DATE OF LAST OTHER TERMINATION (Month, Year) \_\_\_\_\_

29 MOTHER MARRIED? (At birth, conception, or any time between) (Yes or no) \_\_\_\_\_

30 DATE LAST NORMAL MENSES BEGAN (Month, Day, Year) \_\_\_\_\_

31 MONTH OF PREGNANCY PRENATAL CARE BEGAN - First, Second, Third, etc. (Specify) \_\_\_\_\_

32 PRENATAL VISITS Total Number (If none, so state) \_\_\_\_\_

33 BIRTH WEIGHT (Specify unit) \_\_\_\_\_

34 CLINICAL ESTIMATE OF GESTATION (Weeks) \_\_\_\_\_

35a PLURALITY - Single, Twin, Triplet, etc. (Specify) \_\_\_\_\_

35b IF NOT SINGLE BIRTH - Born First, Second, Third, etc. (Specify) \_\_\_\_\_

\*36 APGAR SCORE  
36a. 1 Minute \_\_\_\_\_ 36b. 5 Minutes \_\_\_\_\_

37a MOTHER TRANSFERRED PRIOR TO DELIVERY? ☐ NO ☐ YES If Yes, enter name of facility transferred from: \_\_\_\_\_

37b INFANT TRANSFERRED? ☐ No ☐ Yes If Yes, enter name of facility transferred to: \_\_\_\_\_

38a. MEDICAL RISK FACTORS FOR THIS PREGNANCY (Check all that apply)  
Anemia (Hct. <30/Hgb. <10) 01 ☐  
Cardiac disease 02 ☐  
Acute or chronic lung disease 03 ☐  
Diabetes 04 ☐  
Genital herpes 05 ☐  
Hydramnios/Oligohydramnios 06 ☐  
Hemoglobinopathy 07 ☐  
Hypertension, chronic 08 ☐  
Hypertension, pregnancy-associated 09 ☐  
Eclampsia 10 ☐  
Incompetent cervix 11 ☐  
Previous infant 4000 + grams 12 ☐  
Previous preterm or small-for-gestational-age infant 13 ☐  
Renal disease 14 ☐  
RH sensitization 15 ☐  
Uterine bleeding 16 ☐  
None 00 ☐  
Other 17 ☐  
(Specify) \_\_\_\_\_

38b. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items)  
Tobacco use during pregnancy Yes ☐ No ☐  
Average number cigarettes per day \_\_\_\_\_  
Alcohol use during pregnancy Yes ☐ No ☐  
Average number drinks per week \_\_\_\_\_  
Weight gained during pregnancy \_\_\_\_\_ lbs.  
Other teratogen exposure \_\_\_\_\_

39 OBSTETRIC PROCEDURES (Check all that apply)  
Amniocentesis 01 ☐  
Electronic fetal monitoring 02 ☐  
Induction of labor 03 ☐  
Stimulation of labor 04 ☐  
Tocolysis 05 ☐  
Ultrasound 06 ☐  
None 00 ☐  
MSAFP 07 ☐  
Other 08 ☐  
(Specify) \_\_\_\_\_

40. COMPLICATION OF LABOR AND/OR DELIVERY (Check all that apply)  
Febrile (>100°F. or 38°C.) 01 ☐  
Meconium, moderate/heavy 02 ☐  
Premature rupture of membrane (>12 hours) 03 ☐  
Abruptio placenta 04 ☐  
Placenta previa 05 ☐  
Other excessive bleeding 06 ☐  
Seizures during labor 07 ☐  
Precipitous labor (<3 hours) 08 ☐  
Prolonged labor (>20 hours) 09 ☐  
Dysfunctional labor 10 ☐  
Breech/Malpresentation 11 ☐  
Cephalopelvic disproportion 12 ☐  
Cord prolapse 13 ☐  
Anesthetic complications 14 ☐  
Fetal distress 15 ☐  
None 00 ☐  
Other 16 ☐  
(Specify) \_\_\_\_\_

41. METHOD OF DELIVERY (Check all that apply)  
Vaginal 01 ☐  
Vaginal birth after previous C-section 02 ☐  
Primary C-section 03 ☐  
Repeat C-section 04 ☐  
Forceps 05 ☐  
Vacuum 06 ☐

42. ABNORMAL CONDITIONS OF THE NEWBORN (Check all that apply)  
Anemia (Hct. <39/Hgb. <13) 01 ☐  
Birth injury 02 ☐  
Fetal alcohol syndrome 03 ☐  
Hyaline membrane disease/ROS 04 ☐  
Meconium aspiration syndrome 05 ☐  
Assisted ventilation <30 min. 06 ☐  
Assisted ventilation ≥30 min. 07 ☐  
Seizures 08 ☐  
None 00 ☐  
Other 09 ☐  
(Specify) \_\_\_\_\_

43 CONGENITAL ANOMALIES OF CHILD (Check all that apply)  
Anencephalus 01 ☐  
Spina bifida/Meningocele 02 ☐  
Hydrocephalus 03 ☐  
Microcephalus 04 ☐  
Other central nervous system anomalies (Specify) 05 ☐  
Heart malformations 06 ☐  
Other circulatory/respiratory anomalies (Specify) 07 ☐  
Rectal atresia/stenosis 08 ☐  
Tracheo-esophageal fistula/Esoophageal atresia 09 ☐  
Omphalocele/Gastroschisis 10 ☐  
Other gastrointestinal anomalies (Specify) 11 ☐  
Malformed genitalia 12 ☐  
Renal agenesis 13 ☐  
Other urogenital anomalies (Specify) 14 ☐  
Cleft lip/palate 15 ☐  
Polydactyly/Syndactyly/Adactyly 16 ☐  
Club foot 17 ☐  
Diaphragmatic hernia 18 ☐  
Other musculoskeletal/integumental anomalies (Specify) 19 ☐  
Down syndrome 20 ☐  
Other chromosomal anomalies (Specify) 21 ☐  
None 00 ☐  
Other 22 ☐  
(Specify) \_\_\_\_\_



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portion (Items 38a through 43) relates to medical and health history, and that is the section reviewed by the Committee. The Vital Statistics Department had explained that previously used forms contained open-ended questions which produced such a paucity of useful data that physicians, researchers, and public health officials have asked the states to try an alternate method of obtaining information relating to the need for neonatal facilities, prenatal care, incidence of birth anomalies, etc. The use of a check-box method in a number of other states has improved the quality of reporting.

The proposed form has been two years in the making. It is the Committee's understanding that the proposed certificate will be a three-part, snap-out form with the last portion, containing the check-box questions, being held confidential and destroyed after the appropriate information is put into a system of aggregate data.

The Maternal and Child Health Committee recommends that KMA approve the proposed US standard birth certificate for use in Kentucky and that the physicians of the State be encouraged to cooperate in filling out the form as completely as possible so that necessary data will be made available to the State Cabinet for Human Resources. A copy of the proposed form is made an attachment to this report. Anyone having strong feelings about the use of this form is encouraged to appear before Reference Committee No. 5, which will be studying the Report of the Maternal and Child Health Committee.

Patricia K. Nicol, MD, Director of the Division of Maternal and Child Health and a member of the Committee, shared with the members a report which the Division had presented in May to the legislative Subcommittee on Current Health Care Issues. She explained that the purpose of the report was to provide the Subcommittee with information about services provided by the MCH Division and the extent to which these services help medically indigent people.

I wish to thank the members of this Committee for their interest in maternal and child health matters and their dedication in trying to see that the problems are resolved.

**Danny M. Clark, MD**  
Chairman

### RECOMMENDATIONS:

1. The Maternal and Child Health Committee recommends that KMA approve the proposed US standard birth certificate for use in Kentucky and that the physicians of the State be encouraged to cooperate in filling out the form as completely as possible so that necessary data will be made available to the State

Cabinet for Human Resources. (A copy of the proposed form is made an attachment to this report. Anyone having strong feelings about the use of this form is encouraged to appear before Reference Committee No. 5, which will be studying the Report of the Maternal and Child Health Committee.)

### Recommendations, Reference Committee No. 5.

Reference Committee No. 5 considered the Report of the Committee on Maternal and Child Health and recommends that it be adopted along with the Committee Recommendation.

### Report of the Committee on School Health Physical Education and Medical Aspects of Sports

The Committee on School Health, Physical Education and Medical Aspects of Sports held the Sixteenth Annual Medical Aspects of Sports Symposium in six locations throughout the state. The schedule and program chairmen were:

Louisville, June 5-6, 1987—Raymond G. Shea, MD  
Ashland, June 12-13, 1987—Garner E. Robinson, MD  
Madisonville, June 19-20, 1987—James M. Bowles, MD  
and Joseph Roe, MD  
Owensboro, July 18, 1987—William McManus, MD  
Lexington, July 24-25, 1987—William H. Brooks, MD  
and William G. Wheeler, Jr, MD  
Northern Kentucky, July 24-25, 1987—Carl J. Brueggemann, MD

The different locations were selected so that the Symposium would be more accessible since the State Board of Education mandates that all head coaches in the high-risk sports of football, baseball, basketball, soccer, and wrestling annually attend at least one symposium sanctioned by the KMA Committee on School Health, Physical Education and Medical Aspects of Sports. CPR certification for the head coaches is also required.

The programs for the Symposium consist of lectures and workshops in the various sports. The Symposium is self-sufficient, with all expenses being paid by registration fees and contributions from pharmaceutical and equipment manufacturers.

I would like to express the Committee's appreciation to all regional program chairmen for the many hours they devoted to this year's programs. I would also like to thank the Continuing Education Departments at the University of Kentucky College of Medicine and the University of Louis-

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ville School of Medicine for their assistance with the Lexington and Louisville programs, as well as the Northern Kentucky University for assisting in that program. The committee will meet again in August to evaluate the programs and select dates, sites, and program chairmen for 1988.

Committee members and other team physicians once again covered the 1986 State Boys' Football Playoffs to ensure that all the playoff games in the state had medical coverage.

A brochure dealing with the dangers of drug usage, including anabolic steroids, was prepared by the Committee. With the approval of the Board of Trustees, copies of the brochure are being prepared for distribution to Kentucky's high school athletes. The Kentucky High School Athletic Association (KHSAA) and several pharmaceutical firms are providing assistance. Several members of our Committee have also been involved this year in talking to athletes on the dangers associated with the use of drugs.

Following the tragic accident last year involving a Kentucky cheerleader dismounting from a minitrampoline, and in light of the increasing performance of dangerous cheerleading routines by some of our school squads, several of our Committee members have received numerous calls from other physicians, parents, and the press asking that something be done about this matter. The only state governing body for cheerleaders is the Kentucky Association of Pep Organization Sponsors (KAPOS). Rules established by this organization include no toe pitches, no flip dismounts, and pyramids limited to two people high. However, these rules apply to KAPOS events only and are not rigidly enforced at other events, games, etc.

Through the cooperative efforts of KMA, the State Board of Education, the Kentucky High School Athletic Association, and the Advisory Council for Sports Medicine, "Suggested Guidelines for Cheerleading" have been developed. KHSAA is forwarding copies to all Kentucky high school principals with the admonition that their cheerleading squads adhere to these guidelines. It is also our understanding that the insurance carrier for the schools has refused to cover cheerleaders who do not comply with the guidelines. It is hoped that these guidelines will go a long way toward preventing what could be some very serious injuries.

The passage of the athletic trainers' legislation (KRS 158.640-158.6403) by the 1986 Kentucky General Assembly created an experimental incentive sports medicine program to assist local school districts involved in interscholastic sports. The purpose of this pilot project is "to reduce the rate of injuries and reinjuries by providing selected school districts with . . . teacher-trainers who will develop sports medicine programs that will improve the health care and safety of student athletes." The legislation also created an

11-member Advisory Council for Sports Medicine appointed by the Governor to develop and make recommendations on this program to the State Board of Education. The Chairman of KMA's School Health Committee chairs the statutory Advisory Committee, which has met three times. The Advisory Committee has selected 16 schools, one in each of the 16 state basketball regions, as sites for the experimental teacher-athletic trainer programs, hopefully for the 1987-88 school year. The Advisory Committee is still working on funding since the section of the legislation which would have provided an appropriation was struck prior to passage. The Advisory Council for sports Medicine now has available a "pilot program for teacher trainer" if anyone is interested in receiving a copy.

The Committee on School Health, Physical Education and Medical Aspects of Sports appreciates the cooperation of Kentucky's coaches, officials, trainers, principals, the Superintendent of Public Instruction, the State Board of Education, and the Kentucky High School Athletic Association, all of whom have been so helpful in continuing to monitor the safety of our athletes. We also are grateful for the support of the KMA Executive Committee and Board of Trustees. As Chairman, I would also like to thank all the members of the School Health Committee for the tremendous amount of time and effort they devote.

**R. Quin Bailey, MD**  
Chairman

### **Recommendations, Reference Committee No. 5:**

Reference Committee No. 5 reviewed the report of the Committee on School Health, Physical Education, and Medical Aspects of Sports. The Committee would like to commend R. Quin Bailey, MD, and his Committee members on their efforts, specifically their efforts in developing the brochure dealing with drug abuse, and for the involvement of the Committee in the development of cheerleading guidelines, and teacher athletic-trainer programs. The Committee recommends that the Report be adopted.

### **Resolution B** **Board of Trustees** **Peerview Oversight Committee**

WHEREAS, this House of Delegates has recognized that the activities of the professional review organization (PRO) in Kentucky have an impact on patient welfare and medical practice, and

WHEREAS, at the direction of the House of Delegates, member names were furnished to the PRO, Peerview, for



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service on various committees, with the members' consent, and

WHEREAS, KMA has not adopted a position of support for or endorsement of PRO activities, but does have an obligation to represent the profession to any agency which can influence medical care, and

WHEREAS, KMA has no authority for superintendence of the PRO program, but should provide surveillance of PRO operations as they affect individual members, now therefore be it

RESOLVED, that the Board of Trustees appoint a Peer-view Oversight Committee, and be it further

RESOLVED, that this Committee be charged to represent the Association and its members to Peerview as an advocate and to perform other related functions as indicated.

### **Recommendations, Reference Committee No. 5:**

Reference Committee No. 5 next considered Resolution B, Peerview Oversight Committee, submitted by the Board of Trustees. The Committee recommends that Resolution B be adopted.

### **Resolution Q**

#### **Fayette County Medical Society Medicare Suspect Classification by KMAP**

WHEREAS, the Kentucky Medical Assistance Program (KMAP) has begun to reject claims based on the suspicion that the patient may have Medicare coverage, and

WHEREAS, the KMAP will not accept the patient's written statement of noncoverage by Medicare, and

WHEREAS, the physician has the burden of proving the patient is not covered by Medicare, and

WHEREAS, this results in time-consuming followup and causes the physician's staff to make calls to the patient, as well as to the Social Security Administration, now therefore be it

RESOLVED, that KMA seek changes in the KMAP guidelines classifying a patient as Medicare suspect, which would be more specific in scope than those rules currently being utilized, and which would abbreviate and simplify the time-consuming followup.

### **Recommendations, Reference Committee, No. 5:**

Reference Committee No. 5 next considered Resolution Q, Medicare Suspect Classification by KMAP, submitted by Fayette County Medical Society. The Committee recommends that Resolution Q be adopted.

### **Report of the Ad Hoc Committee on the Development of AIDS Guidelines**

The Ad Hoc Committee on the Development of AIDS Guidelines was appointed to establish a position on Acquired Immunodeficiency Syndrome (AIDS) for the Kentucky Medical Association, which might also be used as a basis for proposed legislation.

The Kentucky General Assembly's Committee on Health and Welfare has been considering public policy issues related to AIDS, and at a meeting in June, Nelson B. Rue, MD, Chairman, KMA Board of Trustees, from Bowling Green, and Ardis D. Hoven, MD, an infectious disease specialist from Lexington, offered testimony and addressed specific issues posed by that Committee. At this meeting Doctor Rue advised that he would ask KMA to develop a policy on AIDS. Doctor Hoven was subsequently asked to Chair a Committee composed of: Reginald Finger, MD, MPH, with the Communicable Disease Branch of the Department for Health Services in Frankfort; and Jayne L. Hollander, MD, Director, Louisville Region of the American Red Cross Blood Service.

The Committee developed the following formal replies to the questions posed by the legislative committee, as well as a document entitled "AIDS Policy Issues," which is attached. These materials are being submitted for approval and subsequent referral to the Health and Welfare Committee. As part of its work, the Committee has also developed an informational document entitled "AIDS Guidelines for Physicians." Because of the length of this document, it is not being disseminated at this point, but will be available on request.

### **Response to the Interim Joint Committee on Health and Welfare**

The Kentucky Medical Association recognizes the medical threat that the infectious disease Acquired Immunodeficiency Syndrome (AIDS) poses to our population, and also recognizes the growing concern of the State's citizens with the spread of this disease. The prevention of the transmission of AIDS must be afforded the greatest priority. In developing the following materials and recommendations, KMA reviewed scientific data related to AIDS, epidemiology, transmission, and prevention.

Of paramount importance is the rational, sensitive, and scientific approach to an infectious disease for which currently there is no known cure, but for which preventive measures are well recognized. KMA has developed a document entitled, "AIDS Policy Issues." This document addresses in some detail issues related to AIDS that have been

discussed by the Subcommittee. KMA has also endorsed the "Interim Report on the Prevention and Control of AIDS" developed by the American Medical Association at its June 1987 meeting. The AMA document addresses and gives background information on policy issues of concern to all segments of society. An informational document, "AIDS Guidelines for Physicians," was also developed and is available upon request from the Kentucky Medical Association.

The following recommendations regarding AIDS policy are offered to the Health and Welfare Committee by KMA.

1. The statutory and regulatory mechanisms for reporting of AIDS cases and individuals exhibiting evidence of prior exposure to the Human Immunodeficiency Virus (HIV) are in place; clarification of these statutes is now available from the Department for Health Services for physicians of Kentucky.
2. Testing for the AIDS virus should be mandatory for donors of blood and blood fractions, organs, tissues, ova or sperm, and, in accordance with Federal policy, immigrants to the United States, military personnel, and Federal and State prison inmates.
3. Through education and counseling, individuals at risk of exposure to the AIDS virus should be encouraged to undergo voluntary testing for the presence of evidence of HIV infection; these groups include homosexual males, intravenous drug users, hemophiliacs, and sexual partners of these individuals.
4. Testing and counseling services for individuals seeking this information must be made widely and readily available; in conjunction, complete confidentiality of counseling and test results must be ensured to remove the fear of discrimination that may prevent at-risk individuals from seeking counseling and testing.
5. Physicians throughout the state would be educated regarding counseling and testing, or referral of individuals seeking this information, in order that infected individuals may become aware of their infectivity and be counseled appropriately to prevent the spread of the disease.

**Ardis D. Hoven, MD**  
**Chairman**

### **AIDS Policy Issues**

Acquired Immunodeficiency Syndrome (AIDS) was first diagnosed in this country in 1981. It is caused by Human Immunodeficiency virus. The virus attacks the natural immune system of the body and makes it susceptible to any of a number of diseases which would be innocuous to normal persons. Associated with the body's lack of natural

immunity is a series of diseases known as AIDS related complex.

The Centers for Disease Control (CDC), the epidemiologic arm of the United States Government, has tracked or monitored all reported cases of AIDS nationwide. There is no known cure for the disease and little effective treatment. The mortality rate for AIDS is predicted to be 100%, and incidence continues to increase.

Of all reported cases, the incidence of the disease is highest among homosexual or bisexual males, intravenous drug abusers, and their sexual partners. All data to date indicate that AIDS is not transmitted through casual contact but, rather, sexual contact, needlesharing, perinatally, and less often through transfusion of blood, or blood products, or needlestick injuries.

This document establishes policy on various AIDS issues strictly from epidemiologic and medical standpoints. No moral position is taken or suggested. Rather, the issue is treated on the basis of known medical facts and documented epidemiologic statistics. While fear of the disease is appropriate, methods to combat it as both a medical and social problem should not be taken through lack of knowledge.

Key factors which **must** be focused on are testing, transmission, and treatment. Testing per se does not prevent the spread of the disease. Treatment should be given based on known medical data. A harsh reality that must be confronted is the cost-effectiveness of testing, as well as treatment.

### **Statutory/Regulatory Factors**

Sufficient laws and regulations are currently in effect to deal with AIDS, as with any other communicable and/or sexually transmitted disease. KRS 211.180 clearly gives this mandate to the Cabinet for Human Resources. KRS 214.010-185 establish requirements for reporting communicable diseases, the handling of blood specimens, and the diagnosis and treatment of venereal disease and other conditions. KRS 214.400, et seq, constitutes the "Sexually Transmitted Disease Confidentiality Act of 1986" passed by the General Assembly, and specifically mentions AIDS. The provisions of these sections include definitions, as well as penalties for not reporting.

902 KAR 2:010, et seq, deal with specific definitions and methods of control of communicable diseases and 902 KAR 2:080 deals specifically with sexually transmitted diseases. Several other sections deal with disease in specific settings, such as hospitals, skilled nursing facilities, family care homes, and others. Finally, the Department for Health Services has recently developed a clarification of the reporting law as it relates to HIV, which is as follows:



### Clarification of Reporting Law as it Relates to HIV

1. Cases of acquired immunodeficiency syndrome (AIDS) are reportable by physicians and hospitals to their local health department or to the Department for Health Services within seven days of diagnosis (902 KAR 2:020). This regulation refers to cases that meet the definition of AIDS promulgated by the Centers for Disease Control. This definition is now in the process of being revised—the Department for Health Services will keep physicians informed of all changes as they occur.

Since AIDS is defined as a sexually transmitted disease by 902 KAR 2:080, physicians and hospitals may substitute a reidentifiable code number for the patient's name and address on the reportable disease card. Since case reports must be screened for duplication at both the state and national level, reporting by name is strongly encouraged. If the patient's address is not reported, the county of residence must be reported. Please report all AIDS cases regardless of where they were first diagnosed. Prevalence as well as incidence is important for projecting medical care costs. Local health departments, the Department for Health Services, and the Centers for Disease Control take special care to maintain confidentiality.

2. Physicians and hospitals are not required to report other clinical manifestations of HIV infection at this time.
3. Because the HIV antibody test is a "serologic test which indicates the presence of infection with an organism associated with a reportable disease" (902 KAR 2:020), laboratories licensed in the state of Kentucky are required to report positive HIV antibody tests to their local health department or to the Department for Health Services. A reidentifiable code number may be substituted for the patient's name and address. This permits reporting of results from sites where testing is being conducted anonymously, so that statistics can be calculated; however, accuracy is limited by the inability to eliminate duplicate reports. Reports of positive HIV antibody tests are not sent to the Centers for Disease Control. Blood and plasma centers may report results in the form of statistical summaries rather than individually.

### Identification Factors

#### Testing

Mandatory testing for the presence of HIV antibodies should be considered only in very rare circumstances. To

reiterate, the disease is not transmitted through casual contact, and the statistical possibility of finding a seropositive person in any general population group is quite low. Voluntary testing for the presence of HIV has proven to be more effective when coupled with post-test counseling to seropositives on issues relating to the duration, manifestation, treatment, and likely outcome of the infection. Counseling of patients with positive testing results is one of the most effective ways to accomplish prevention. Except in rare circumstances, mandatory testing serves only to make individuals avoid being tested in order to escape the social and psychological stigma of the presence of the disease.

Currently, there are four testing sites operated by the Department for Health Services and plans are underway to provide testing services in family planning clinics, drug abuse centers, and mental health centers. Counseling—again, one of the most effective ways to accomplish prevention—should be targeted for expansion by means of increased State funding, Federal funding, and grant applications. An AIDS education effort should be primarily directed toward already identified high risk groups, and secondarily, other large homogeneous groups, such as large employee groups, schools, and so forth.

### Statistical Effectiveness of Universal Testing

#### Blood Centers

The collection for further medical use of blood, blood products, body tissues and organs is appropriate. Simply, if the presence of the AIDS virus is detected, the blood or tissue can be diverted from human use. However, medical ethics demand that the individual from whom such specimens are acquired be notified confidentially and provided with voluntary counseling.

#### Employee Groups

The only justification for testing large employee groups is if a demonstrated reason could be shown as to why an institution must be entirely free of the virus. Such testing should be done in a nondiscriminatory manner, and testing specifically for HIV should be consistent with testing for all other diseases. In such circumstances, testing and concomitant medical costs should be borne by the employer. There should also be no discrimination by the insurance industry with regard to medical benefits coverage.

#### Hospital Setting

Mandatory testing of all hospital admissions is not appropriate. Adequate medical protocols already exist in all hospitals for appropriate precautions in handling body fluids. Realistically, testing every hospital admission would not be effective. The initial, or ELISA, test requires at least four

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hours of laboratory time to perform, which would result in a delay of eight to 24 hours before results were known. A positive ELISA test requires further substantiation by the Western blot test, which can only be accomplished in a small number of facilities, and the turnaround time for this test is approximately three weeks.

At an initial ELISA test cost of \$10, \$100,000 would be spent for every infected patient identified. Assuming that the needlestick rate in a hospital with 12,000 admissions per year is 30-40 per year, and assuming further that once a patient was known to be HIV positive, three-fourths of all needlesticks from that patient would not occur, \$40 million would be expended for every infectious needle stick prevented. Because the risk of infection from a needlestick is only one in 200, \$8 billion would be spent for every infection prevented. As mentioned previously, the patient's right to treatment in the hospital and informed consent regarding that treatment cannot be overlooked.

### Premarital Testing

It is estimated that one in 10,000 persons tested in a premarital setting would test positive. This would cost \$100,000 per identification. If a marriage license is denied on the basis of a blood test, the couple involved would likely seek a license elsewhere or cohabitate without a license. A more reasonable and effective step to take would be to make available voluntary counseling at the time of a marriage license application which might have some effect on preventing sexual transmission.

### Food Handlers

As already mentioned, there is no evidence that the disease is transmitted through casual contact, or specifically, by food handlers. Again, such testing might indicate the presence of the infection, but it would have no effect on prevention.

### Contact Tracing

Statutes and regulations already mentioned require the reporting of the presence of communicable diseases, primarily by medical personnel. Any contact tracing is necessarily voluntary, because there is no way to validate the information given. Information given voluntarily is likely to be accurate because of a concern for the welfare of sexual and drug abusing partners. The clarification of the reporting law already stated gives guidelines for physicians and others to make such reports, which are essentially of epidemiologic value only.

### Isolation

Isolation of AIDS victims serves no purpose. Disease transmission does not occur through casual contact, and

isolation would be prohibitive financially. Because it is predicted that patients are infectious for life, the State would be faced with the costs of isolation for the length of the patient's life.

### Confidentiality

Current medical confidentiality laws are valid and effective. From the standpoint of day-to-day medical treatment at a facility, AIDS patient records could be identified by "biohazard" signs on the patient's door and medical chart without identifying a particular disease. These identifying indicators are routine in most facilities, and would maintain the confidentiality of the patient's status. Likewise, medical facility personnel should treat blood, blood products, body fluids, and body tissues using the same protocols already established for other so-called "biohazard" materials. Some form of labeling should be used to identify risk factors to laboratories when transferring human tissue and liquid products to laboratories from private physicians' offices.

### Resolution S

#### Jefferson County Medical Society Reportability of Communicable Diseases

WHEREAS, certain communicable diseases are reportable as a matter of law in Kentucky, and

WHEREAS, any asymptomatic patient with confirmed HIV-Positive test results poses a significant and deadly threat to the public health, now therefore be it

RESOLVED, that the Kentucky Medical Association work with the State Health Department and the State Legislature, as appropriate, to guarantee that communicable diseases required to be reported to the State Health Department include confirmed HIV-Positive test results in asymptomatic patients.

### Recommendations, Reference Committee No. 5:

Reference Committee No. 5 next considered Report No. 5, Report of the Chairman, Board of Trustees, Report of the Ad Hoc Committee on Development of AIDS Guidelines, **only**, and its five recommendations, together with Resolution S, Reportability of Communicable Diseases, submitted by Jefferson County Medical Society. The majority of Reference Committee 5 recommends that the Recommendations of the Ad Hoc Committee on AIDS Guidelines, **only**, be adopted in lieu of Resolution S.

Two members of Reference Committee No. 5 did not agree with the majority and have filed a Minority Report on this subject, which is attached.

The motion was seconded from the floor.



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Lynn L. Ogden, MD, Delegate from Jefferson County, made a motion that the recommendation contained in the Minority Report (printed below) be considered as an amendment to the Report of the Ad Hoc Committee on the Development of AIDS Guidelines. The motion was seconded.

### MINORITY REPORT OF REFERENCE COMMITTEE NO. 5

The Minority Report filed by Lynn L. Ogden, MD, of Louisville, and Donald E. Brown, MD, of Somerset, recommends that Resolution S be amended as follows and added to Recommendation No. 1 of the Ad Hoc Report on AIDS:

**“RESOLVED, that the Kentucky Medical Association work with the State Health Department and the State Legislature, as appropriate, to guarantee that communicable diseases required to be reported to the State Health Department include confirmed HIV-Positive test results in asymptomatic patients, and be it further”**

**“RESOLVED, that physicians be strongly urged to provide education and counseling to such reported patients about the modes of transmission and precautions necessary to prevent the spread of HIV.”**

Mr. Speaker, the minority recommends adoption of the Minority Report, which constitutes an addition to recommendation No. 1.

**Respectfully submitted,**

**Lynn L. Ogden, II, MD, Louisville  
Donald E. Brown, MD, Somerset**

William C. Templeton, II, MD, Delegate from Jefferson County, was recognized, and proposed a substitute to the Minority Report as offered by Doctor Ogden. Doctor Templeton made a motion that in lieu of the proposed Resolved in the Minority Report, a section of Report YY of the AMA Board of Trustees, titled “Prevention and Control of AIDS - An Interim Report,” (A-87), be inserted. That section reads:

“Individuals who are found to be seropositive for the AIDS virus should be reported to appropriate public health officials on an anonymous or confidential basis with enough information to be epidemiologically significant.”

The motion was seconded, and Doctor Ogden stated he would accept the amendment to the Minority Report. Following a lengthy discussion and remarks by the Commissioner of Health Services, the vote on the amendment was 85 in favor, 57 opposed.

The Speaker then asked for a vote on the motion that the Minority Report, as amended, be considered as an amendment to the Report of the Ad Hoc Committee. The result was 62 in favor, and 90 opposed; therefore, the Minority Report, as amended, was defeated.

**Consideration was then given to the original motion of the Reference Committee that the Recommendations of the Ad Hoc Committee on AIDS Guidelines, only, be adopted in lieu of Resolution S. The motion carried.**

### Resolution T Jefferson County Medical Society Communicable Disease Screening

WHEREAS, physicians have an obligation to themselves, their families, their patients, and to all health care workers involved in the treatment of their patients, to provide reasonable freedom from risk of contracting communicable diseases from the physicians' patients, and

WHEREAS, an HIV-Positive patient in the hospital setting brings significant risk of contracting a fatal communicable disease to all of the above-named groups, now therefore be it

RESOLVED, that the Kentucky Medical Association encourage hospital medical staffs to adopt routine communicable disease screening, including HIV testing, of all patients upon admission, preoperative or prenatal evaluation.

### Recommendations, Reference Committee No. 5:

Reference Committee No. 5 next considered Resolution T, Communicable Disease Screening, submitted by Jefferson County Medical Society. The Committee recognizes the importance of communicable disease screening, including HIV testing, when deemed appropriate by the attending physician, but thinks this should be left to the discretion of the attending physician. The Committee recommends that Resolution T be rejected.

The motion was seconded.

Larry P. Griffin, MD, Delegate from Jefferson County, was recognized and made a motion that Resolution T be adopted as amended by substitution of the following Resolved:

**“RESOLVED, that the KMA instruct hospital medical staffs to adopt guidelines and rules for mandatory HIV testing of patients at risk of transmitting infection in the hospital setting to health care workers or other patients as a result of either personal risk factors or risk of exposure on a procedural basis.”**

The motion was seconded, but was defeated.

On a call for the vote, the House agreed with the Reference Committee's recommendation that Resolution T be rejected.

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## **Resolution W Board of Trustees Medicare Assignment**

WHEREAS, the Medicare Program has undergone significant change in recent years, which has worked to the detriment of patients and resulted in inequitable treatment of physicians, and

WHEREAS, these negative influences have been generated by a governmental commitment to assure the provision of services but, in the absence of prudent management and funding, resulted in penalization of providers, and

WHEREAS, physicians continue to provide care, regardless of arbitrary and unfair governmental intrusion, and

WHEREAS, physician dedication to patient care is substantiated by the fact that over 70% of all Medicare claims are submitted on an assigned basis, even though only 30% of physicians in the state have signed Medicare participation agreements, now therefore be it

RESOLVED, that KMA encourage physicians to accept Medicare assignment based on the individual circumstances of the patient.

## **Recommendations, Reference Committee No. 5:**

Reference Committee No. 5 next considered Resolution W, Medicare Assignment, submitted by the Board of Trustees. The Committee recommends that Resolution W be adopted.

## **Resolution X Board of Trustees Medical Services for the Elderly and Indigent**

WHEREAS, the availability of medical care for the aged, indigent, and children is and has been a priority for physicians throughout the history of medicine, and

WHEREAS, Kentucky physicians have traditionally fulfilled their obligations to those in medical need without regard for ability to pay for care or the payment source, and

WHEREAS, KMA's commitment to the indigent can be substantiated through the development and operation of the Kentucky Physicians Care program, which provides free care through voluntary, uncompensated physician services, and

WHEREAS, a commitment to the elderly is indicated by the fact that over 70% of all Medicare claims are accepted as payment in full, and

WHEREAS, physicians have maintained their record of service, regardless of dwindling State and Federal financial resources, now therefore be it

RESOLVED, that KMA reaffirms the time-honored tradition of the medical profession to provide medical services to those in need, regardless of ability to pay.

## **Recommendations, Reference Committee No. 5:**

Reference Committee No. 5 next considered Resolution X, Medical Services for the Elderly and Indigent, submitted by the Board of Trustees. The Committee recommends that Resolution X be adopted.

## **Resolution Y Board of Trustees Medicare Denial of Payment Notification**

WHEREAS, a provision of the Omnibus Budget Reconciliation Act of 1986 requires that patients be advised retrospectively of hospital admission payment denials, and

WHEREAS, such notifications are to be made in instances where so-called quality-of-care problems exist, with the further provision that the patient will bear no financial obligation for the hospitalization, and

WHEREAS, this Congressionally mandated determination of fault poses a significant liability predicament for physicians and hospitals by establishing an admission denial as prima facie evidence of wrongdoing, and

WHEREAS, this administrative declaration can only worsen the medical liability situation, as well as have an effect of availability of care and physician/patient relationship, now therefore be it

RESOLVED, that KMA make appropriate contact with the Kentucky Congressional delegation and Health Care Financial Administration to attempt to modify or mitigate the retroactive denial notice of hospital admissions, and be it further.

RESOLVED, that KMA seek assistance from the Kentucky Hospital Association, the professional review organization, and other affected representative organizations on this issue.

## **Recommendations, Reference Committee No. 5:**

Reference Committee No. 5 next considered Resolution Y, Medicare Denial of Payment Notification, submitted by the Board of Trustees. The Committee heard testimony regarding the provision of the Omnibus Budget Reconciliation Act requiring that patients be advised retrospectively of hospital admission payment denial. The potential for significant liability placed on physicians and hospitals is considerable under this practice. The involved physician has no opportunity for rebuttal or appeal of the denial before



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notification of the patient. Therefore, the Committee heartily recommends adoption of Resolution Y.

### **Resolution Z Board of Trustees Medicare Outpatient Services**

WHEREAS, the concept of reimbursement for medical services on the basis of diagnostic related groups (DRGs) has been of questionable benefit in encouraging the delivery of high quality medical care, and

WHEREAS, the DRG reimbursement concept will be further imposed on outpatient services covered by Medicare as of October 1, 1987, and

WHEREAS, the proposed rates of reimbursement to hospitals for outpatient surgery under the current DRG plan will severely limit or curtail services, now therefore be it

RESOLVED, that KMA inform and work through the Kentucky Hospital Association, the American Medical Association, and the Kentucky Congressional Delegation, as appropriate, to repeal or amend the Federal statutes compelling implementation of outpatient DRGs, and be it further

RESOLVED, that KMA also explore other alternatives to minimize any deleterious effects on patient welfare and medicare service delivery.

### **Recommendations, Reference Committee No. 5:**

Reference Committee No. 5 next considered Resolution Z, Medicare Outpatient Services submitted by the Board of Trustees. The Committee recommends that Resolution Z be adopted.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 5, as a whole.

I would sincerely like to thank the other members of the Committee: Lynn L. Ogden, II, MD, Louisville; James M. Bowles, MD, Madisonville; Donald E. Brown, MD, Somerset; and Scott Scutchfield, MD, Danville. I would also like to thank Sharon McCrary for her assistance in the preparation of this report.

### **REFERENCE COMMITTEE NO. 5**

**Ardis D. Hoven, MD, Lexington, Chairman**  
**James M. Bowles, MD, Madisonville**  
**Donald E. Brown, MD, Somerset**  
**Lynn L. Ogden, II, MD, Louisville**  
**Scott Scutchfield, MD, Danville**

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*Editorial Note: Unless otherwise indicated, the Reference Committee action on each Report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.*

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## **REPORT OF REFERENCE COMMITTEE NO. 6**

**James R. Cundiff, MD, Chairman**

Reference Committee No. 6 considered the following Reports and Resolutions:

- 40. Report of the Judicial Council
- 41. Report of the Rural Kentucky Medical Scholarship Fund
- 42. Report of the Physician-Attorney Liaison Committee
- 43. Report of the Membership Committee
- 44. Report of the Committee on Constitution and Bylaws
- 45. Report of the McDowell House Board of Managers
- 46. Report of the Medical Student Section
- 47. Report of the Resident Physicians Section

Resolution M – Resident On Call Schedules  
(Resident Physicians Section)

Resolution O – Study of Rural Kentucky Medical Scholarship Fund  
(University of Kentucky Medical Student Section)

Resolution P – KMA Offices  
(Fayette County Medical Society)

### **ITEMS FOR CONSENT**

Reference Committee No. 6 reviewed the following items and recommends they be filed, by the consent of the House, without discussion:

- 40. Report of the Judicial Council - filed
- 41. Report of the Rural Kentucky Medical Scholarship Fund - filed
- 42. Report of the Physician-Attorney Liaison Committee - filed
- 43. Report of the Membership Committee - filed
- 45. Report of the McDowell House Board of Managers - filed
- 46. Report of the Medical Student Section - filed
- 47. Report of the Resident Physicians Section - filed

### **Report of the Judicial Council**

The Judicial Council has continued its routine this year of meeting every two months to discuss issues in the form of patient complaints, referrals from the KMA House of Delegates, and referrals from other agencies and sources.

This year two Resolutions adopted by the 1986 KMA House of Delegates were referred to the Council for its consideration. The first, Resolution T, called on KMA to

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actively support the Board of Medical Licensure in the interest of achieving the highest degree of professionalism. To the extent that it is appropriate, the Council has and continues to work closely with the Licensure Board and, to satisfy the intent of the Resolution, periodic reports of the Council's efforts have been published in the *KMA Journal*.

Resolution L declared that second opinion consultants should provide a copy of all consultation reports, in a timely manner, to the initial physician before a scheduled surgical procedure, as a matter of good patient care. The Council accepted this Resolution as information, as the issue was published in the *Journal* and the "Communicator" to advise all members.

Another matter of a policy nature came to the Council's attention relating to dispensing drugs from physicians' offices. It was noted that legislation was pending at the Federal level on this matter. In any event, the Council held that the dispensing of drugs by a physician was a traditional practice and not unethical as long as no exploitation of the patient resulted. Subsequently, the AMA Council of Ethical and Judicial Affairs ruled that physicians should avoid regular dispensing and retail sale of drugs when such needs can be met by local ethical pharmacists and suppliers.

The Council became involved in an investigation of the Association by the Federal Trade Commission (FTC) relating to advertising. A county medical society had held discussions with an individual member about advertising, and the matter was ultimately resolved. After this action, the FTC initiated an investigation to determine if the Association had taken part in proscribing any advertising. The Council had previously published voluntary guidelines, which were fairly general, but this action resulted in an expansion of the investigation to include another county medical society, as well as KMA. KMA has offered to revise its voluntary advertising guidelines, but the matter has not yet been finalized with the FTC.

A number of matters were addressed that were prompted by members' concerns. In one instance the Council was advised that local news media had published indications of inappropriate medical practice. Because of the nature of the situation, it was referred to the Board of Medical Licensure for investigation, and the Council learned that charges were pending against the physician in another state. In another situation, the Council learned that a physician was individually publishing a brochure describing his practice, but the Council determined that no false or misleading advertising was taking place.

The KMA Committee to Investigate Changing Trends in Medicine had requested that the Council develop an opinion on administrative pressures exerted by various emerging cost containment plans to reduce or avoid rendering care.

This matter has been referred to Legal Counsel with the intent that the Council will attempt to develop guidelines or issue an opinion.

The Council heard one complaint on appeal from a county medical society concerning autopsy procedures. A relative not in the patient's immediate family had given consent to an autopsy and had signed a consent form. This person was not familiar with routine autopsy procedures and later became concerned about what had occurred and his role in the matter through providing his consent. The Council explained to the relative what was involved in a routine autopsy and described the care rendered to the patient before her death. Realizing that at such times relatives are undergoing severe emotional stress, the Council would recommend that physicians make all reasonable efforts to explain autopsy procedures in a sensitive manner.

One complaint was received from a nurse anesthetist who maintained that a former physician employer was guilty of improper billing and was blocking his future employment. Through the very helpful intercession of the Trustee, an investigation was conducted, and it was learned that the former employer had recommended against the nurse anesthetist's independent practice in the hospital. It was further learned that a suit had been initiated by the nurse anesthetist which was dismissed in summary judgment and the matter was closed.

In another instance, the effective intervention of the Trustee also resolved a matter where a patient had complained that a physician had rendered inappropriate treatment and had proselytized the patient. After speaking with both parties, the Trustee was able to resolve the matter to everyone's satisfaction.

A number of patient complaints were received and disposed of which are of interest. In one situation a patient complained that a physician would not transfer his records, even though he had signed a release. It was learned that the physician had transferred the basic records, but was making a charge for release of extensive records. Citing Section 7.01 of the "Current Opinions of the Council on Ethical and Judicial Affairs of the American Medical Association," the Council noted that all authorized materials should be provided upon request. At the same time, the Council thought that it was appropriate for the transferring physician to make a reasonable charge, in a nondiscriminatory manner, because of the volume of records being transmitted.

A patient complained in another situation that an anesthesia charge was excessive and the service had been performed by a nurse anesthetist rather than a physician. After contacting the physician, the Council learned that an incorrect charge had been made through a billing error, but



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that provision of anesthesia by the nurse anesthetist had been appropriate.

One patient rendered a complaint that his physician would not file claims for reimbursement by a government medical program, but on investigation, it was learned that the physician had twice submitted the claims in question and, in addition, had given blank forms and all necessary information to the patient to submit a claim.

In a situation where a physician was opening a new office, notice was inadvertently sent to a patient of the physician's former associate, and it was learned that the notice resulted from a computer error.

In one notable case, the Council was called on to review charges of inappropriate treatment by a physician providing obstetrical and gynecological care. Because of several misunderstandings on the part of the patient and the family, the Council conducted an investigation which lasted nearly 1½ years. It was found that the physician bore no fault and that the entire experience consisted of a rather lengthy period of patient education.

Considering the nature of patient complaints overall, the Council would observe that there seems to be a growing trend in the general patient population to, if not question services, at least exhibit a higher level of sophistication and knowledge of medical procedures. Unfortunately, this concern on the part of patients is not complemented by an equal knowledge of insurance or care delivery plans. The Council would urge all physicians to try to become as familiar as possible with various insurance programs and care delivery plans to avoid misunderstandings and distrust.

As a point of personal privilege, I would like to thank the Council members for electing me to serve as Chairman this year, and would like to thank the House of Delegates on behalf of the Council for your confidence in appointing us to serve you.

**Earl P. Oliver, MD**  
Chairman

### **Report of the Rural Kentucky Medical Scholarship Fund, Inc.**

As it has for the past forty years, the Scholarship Fund continues to provide financial assistance to medical students in return for their commitment to practice in an underserved area of the State of Kentucky.

For the term 1987-88, loans of \$6,000 will be granted at an interest rate of 4%. Ten new applicants, seven of whom are women, were interviewed and approved for financial assistance. Thirteen renewal requests were received.

Three recipients are entering Family Practice residencies, and 19 others are currently enrolled in various primary care programs. Thirteen are entering practice in 1987, two of whom will practice in critical counties, 11 in rural counties. Eleven physicians were granted forgiveness in 1986/87 for practicing in critical counties. The total number of scholarship recipients practicing in Kentucky is 275 in 99 of the 120 counties. These figures are based on Kentucky Board of Medical Licensure statistics.

For ten years, 1970 to 1980, the Fund awarded establish practice loans to physicians willing to practice in critical counties. During that time, 18 physicians received such loans, nine of whom are still practicing in those same critical counties. The Fund is currently investigating the possibility of reestablishing this loan format.

The Scholarship Fund has proven to be a successful aid in securing physicians for rural areas. The Fund's success has been based on the dedication of the members of the Board of Directors and the continued assistance and support of the Kentucky Medical Association.

**Carolyn H. McKinley, MD**  
Chairman

### **Report of the Physician-Attorney Liaison Committee**

The KMA/KBA Physician-Attorney Liaison Committee had not met at the time this report was drafted. However, a Committee meeting is scheduled for August 27, at which time several cases of complaints will be reviewed. The Committee is composed of seven physicians and seven attorneys. The purpose of the Committee is to foster good professional relations between the medical and the legal professions, and resolve complaints in accordance with the Interprofessional Code. This Committee urges every physician to read the Interprofessional Code which is printed biennially in the January issue of the *Journal of the Kentucky Medical Association*. Copies of the Code may be obtained by calling or writing the Kentucky Medical Association.

At the scheduled meeting in August, the joint Committee has agreed to discuss tort reform. Members of this Committee were involved in the efforts put forth in 1976 and have some knowledge of the issue. We, of course, will be pursuing the four points proposed by the House of Delegates, which include: amend Section 54 of the Kentucky Constitution to permit the KGA to limit noneconomic damages; modify the collateral source rule; permit periodic payments; and lower the statute of limitations for minors.

On behalf of members of the Committee, we appreciate the opportunity to serve, and urge members of the Asso-

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ciation to forward any complaints they may have, with regard to relationship with the legal profession, to the Committee.

**Thomas M. Marshall, MD**  
Co-Chairman

### **Report of the Membership Committee**

The Membership Committee is pleased to report that membership in the Association reached an all-time high in 1986 with 5,150 physician, resident, and medical student members, representing a 10% increase over 1985 figures. Through a comprehensive plan of recruitment and retention, KMA welcomed 573 new members to the Association and retained 98% of the previous-year members.

Total dues-paying membership (Active, In-Training, Associate, and Inactive) was up 6%, for a gain of 228. In the "Active" category, membership increased by 145, representing a 4.3% gain. This increase is particularly significant when compared with the 1985 net gain of one new "Active" member after membership losses were considered.

Loss of "Active" members was still rather high last year, at 223, as:

42 - Changed from Active to Life

80 - Moved out of state

17 - Died

3 - Became ineligible due to Licensure Board action

81 - Did not renew

This continual loss of membership reinforces our belief that membership development must be an ongoing effort of the Association and that it is more important than ever that we encourage our colleagues to support organized medicine.

### **Recruitment**

Activities to increase membership for 1987 began just prior to last year's Annual Meeting and included a statewide peer-to-peer campaign, special mailings, and various promotional efforts.

The Committee would like to thank KMA's Alternate Trustees who participated in a membership recruitment campaign last summer. Over 580 personal contacts to nonmembers were made, resulting in the addition of 81 new members. Donald J. Swikert, MD, Florence, was recognized for his efforts in making more than 100 contacts and recruiting 24 new members in the Eighth Trustee District.

In another peer-to-peer activity, several members of the Committee staffed a membership booth during the 1986 Annual Meeting and encouraged KMA Delegates to contact nonmembers in their counties. It is hoped that more Delegates and other KMA members will take part in this year's outreach program, as membership surveys indicate that "suggestions from fellow physicians" was a "very significant" reason for joining.

A major portion of our recruitment activity again this year involved direct mail with over 14 separate mailings being sent to various segments of the nonmember population. In addition to four statewide mailings, targeted mailings were directed to specific groups; ie, physicians in their first year of practice, residents, students, nonmember faculty at the University of Kentucky Medical Center, and physicians in counties where membership is low.

One of the statewide direct mail campaigns included a reprint of the October issue of the *Journal of the KMA*. Produced as a special membership issue under the direction of the Membership Committee, the publication featured articles written by a number of KMA members emphasizing the important role organized medicine has in today's medical climate. The Committee would like to thank the following authors for their contributions to this effort: Richard F. Hench, MD; Earl P. Oliver, MD; Charles C. Smith, Jr, MD; Robert L. Wood, MD; Hiram C. Polk, Jr, MD; Sally S. Mattingly, MD; Fred C. Rainey, MD; Harold L. Bushey, MD; Dwight L. Blackburn, MD; and particularly *Journal* Editor A. Evan Overstreet, MD, and the Editorial Board for their support in publishing this special issue.

Recruitment of residents and students for membership in KMA continues to be an important aspect of our membership plan. In-Training membership experienced a 40% growth last year and we currently represent almost one-half of the residents in Kentucky. We were encouraged that more than 130 new residents were recruited during Housestaff Orientations held June 29 at the University of Kentucky and June 30 at the University of Louisville. The Committee wishes to thank Andrew R. Pulito, MD, and Bob M. DeWeese, MD, for representing KMA and their county medical societies at this year's Orientations.

A joint effort at the county and state levels to increase student membership resulted in a 26% increase at the end of 1986. Currently, 80% of the students at U of L and 38% of the U of K medical students belong to KMA. One recruitment tool which has been effective in this increase is a Medical Student Directory which is published by KMA for each of the medical schools.



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### Retention

A major concern of the Committee during the past year has been in retaining our current members and increased emphasis has been placed on retention efforts. Subsequent to the initial billing of members in November, five separate mailings have been sent to encourage renewal. Additionally, for the third year KMA's Executive Committee conducted a Phonathon to contact members who had not renewed their membership for 1987. This year's Phonathon was held April 1 and 83 contacts were made. Although 75% indicated they would renew, currently 36, or 43%, have done so. Comparing this figure with the renewal rate of those we were not able to reach (28%), it is evident that a personal contact has a positive effect on membership retention. Participating in this year's Phonathon were: Richard F. Hench, MD; Donald C. Barton, MD; Nelson B. Rue, MD; Thomas R. Watson, MD; Bob M. DeWeese, MD; William B. Monnig, MD; and Harold D. Haller, MD

### Member Services

The Membership Committee has sponsored a number of workshops and seminars during 1986-87 to benefit members of the Association. Fifty new physicians attended the "How to Get Started in Medical Practice" workshops held in November and March. This program continues to receive favorable evaluations and has served as a valuable tool in recruitment of young physicians, as a total of 43 new members have joined as a result of the workshops.

KMA, along with the Jefferson and Fayette County Medical Societies, sponsored a series of workshops on "How to Improve Third Party Reimbursement and Coding" in March and June. Held at various locations in the state, a total of 343 physicians and office personnel attended these workshops which were presented by Conomikes Associates, a practice management consulting firm. Because of the interest in this area, additional workshops are scheduled for the fall of 1987.

The Membership Committee, at its meeting on July 8, 1987, made preliminary plans to sponsor additional practice management workshops this fall in the areas of employee relations/contract review and retirement planning.

Another KMA benefit, the group Worker's Compensation Plan, resulted in a 40% return in premium, amounting to more than \$2,600 overall, to members participating in the program. Approved by KMA as an opportunity for its members to obtain this coverage under a group policy, the Plan is administered by Casualty Reciprocal Exchange, a member of the Dodson Insurance Group.

The Committee continues to pursue avenues to benefit the membership and welcomes input in this area from members of the Association.

As has been our custom in this annual report, the membership status as of June 30, 1987, follows:

Membership Category	# as of 6/30/87	# as of 12/31/86
Active	3,498	3,569
In-Training	257	250
Total Dues-Paying	4,005	4,056
Total KMA All Categories	4,913	5,150

On behalf of the Committee members, we wish to thank all the physicians who have participated in personal recruitment this year and encourage others to become involved in these efforts. Protecting and improving the quality of medical care in this state are goals that should be supported by every physician through membership in organized medicine.

Harold D. Haller, Sr, MD  
Chairman

### Report of the McDowell House Board of Managers

The past year saw changes in the makeup of the McDowell House Board of Managers with the passing of Jim Cogar, longtime Board member and authority on historical homes and community institutions. Mr. Cogar had made significant contributions to the success of the McDowell House and Apothecary Shop museum. Mr. Cogar's loss was offset by the addition of two new members, Mrs. Robert McVay, Lexington, President of the District IX Colonial Dames of America, and Wally O. Montgomery, MD, Paducah, Past President of the Kentucky Medical Association.

At the time of this report, the Endowment Fund of the McDowell House and Apothecary Shop had reached \$187,907.26, the interest from which serves to play an essential role in maintenance and restoration projects for the House. It now appears that somewhere between \$8,000 and \$9,000 interest yearly will be received from this permanent Endowment Fund. Efforts by a financial committee are underway to further define and oversee the endowment Fund to fulfill the requirement of the James Graham Brown Foundation, which instituted the challenge grant drive in 1985.

Significant contributions, as always, from the many and varied fund raising and other activities of the Auxiliary to the Kentucky Medical Association were highlights for the

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year and received the plaudits of the McDowell House Board. Though not as spectacular this year as in the past, our contributions from the "Friends of the McDowell House" donor group, along with those pledges from major medical organizations, continue to finance day-to-day operations of the House.

A long-awaited formal agreement with the University of Kentucky for the preservation, maintenance, and access to all McDowell documents was completed and includes a clause which permits access to these valuable documents by interested scholars and those connected with the McDowell House Board of Managers.

A notable event in the spring was the presentation by Robert S. Sparkman, MD, of Dallas, Texas, of a gavel made from wood from Todds Mill on Whistle Creek in Rockbridge County, Virginia, which was operated almost a century by the family of Jane Todd Crawford. A significant gift of artifacts from the estate of Eleanor Tevis Faulkner was received and is to be studied and categorized as to historical import.

The future plans for the McDowell House Board include preparing the necessary documents for application to the American Society of Museums. This will require the drafting of rules and Bylaws and Statement of Purpose documents, which will also more clearly define the appointments and length of service of the members of the McDowell House Board of Managers.

This has been another interesting and successful year of operation for the McDowell House, and the House remains in a good financial position.

**David W. Kinnaird, MD**  
**Chairman**

### **Report of the Medical Student Section**

The KMA Medical Student Section has experienced a great deal of activity at both medical schools in the state. Current membership stands at 507, with 80% of the medical students at the University of Louisville and 38% of the University of Kentucky medical students as members of the KMA-MSS. A report from each of the chapters follows:

#### **University of Kentucky**

This was a reorganizational year for the MSS at the University of Kentucky which began with sending Baretta Casey as a Delegate to the AMA-MSS Interim Meeting in December to learn about the organization and policy structure of the MSS. An informational meeting was then held at the U of K College of Medicine on January 19, 1987, with 28

people in attendance. KMA President Richard F. Hench, MD, and John E. Trevey, MD, President-Elect of the Fayette County Medical Society, spoke to the students about the importance of organized medicine.

As a result, the U of K Chapter of the KMA-MSS was formally organized on February 3 and election of officers for the 1987-88 academic year was held. Several meetings have taken place to inform the members about services of KMA and the FCMS and to discuss student policy.

The Section was represented at the AMA-MSS Annual Meeting, held June 19-21 in Chicago, by Charles Ison as Delegate and Judy Linger as Alternate Delegate. Other students attending the meeting were John Trump and Alice Miller.

The U of K Chapter of the KMA-MSS will have a booth during Freshman Orientation on August 14 and members will distribute information on membership.

We wish to express our appreciation to KMA for its support of these activities and for providing us the opportunity to participate at the national level in issues that will affect our future practice of medicine.

#### **University of Louisville**

Officers and class representatives of the MSS at the University of Louisville were elected at the beginning of the academic year and material was distributed to the freshman and sophomore classes about membership in KMA and the Jefferson County Medical Society. To provide further information, the U of L Chapter of the KMA-MSS sponsored a pizza luncheon meeting on November 24, 1986, and we appreciated Bill Applegate from KMA, Lelan Woodmansee from JCMS, Ron Gagliardi from Kentucky Telco, and Morton Bell, representing KMIC and the KMA Insurance Agency, participating in this program.

Openings for students on several KMA Committees were discussed at the September meeting of the U of L Chapter and several were appointed to these positions. The students have appreciated the opportunity for direct input in several areas of Association work and have attended Committee meetings whenever possible.

With the support of KMA and the Student Affairs Committee at the University of Louisville, two students were able to attend the AMA-MSS Interim Meeting held in Las Vegas in December. Evelyn Montgomery, Delegate, and Holly Brown, Alternate Delegate, attended MSS meetings and Reference Committee meetings, voting on a wide spectrum of issues. In addition, the students met with the Kentucky Delegations and attended the opening assembly of the AMA House of Delegates. The Section was represented at the AMA-MSS Annual Meeting in June by Terry Cleaver, Todd Pesavento, and Mark Hughes.



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We appreciate the opportunity to be involved in these areas and to have a voice in organized medicine.

Baretta Casey, U of K Delegate  
Evelyn Montgomery, U of L Delegate

### Report of the Resident Physicians Section

Since the establishment of the KMA Resident Physicians Section three years ago, In-Training membership has experienced tremendous growth. With the recent addition of some 130 resident members beginning their first year of training, the Section currently represents almost 50% of the resident population in Kentucky.

The Governing Council of the KMA-RPS met on March 18 to elect officers for the coming year and to discuss future direction of the Section. Issues of concern to residents which were addressed by the Council members included: educating residents about practice management, malpractice concerns, the corporate influence on medicine, and the resident's perception of organized medicine. Efforts are being made with the residency programs at the University of Louisville and University of Kentucky to coordinate a series of seminars dealing with these other issues of interest to housestaff physicians.

Along these lines, the Section is pleased that the 1986 House of Delegates adopted the KMA-RPS Resolution which called for KMA to encourage residency programs in the state to consider the development of programs for housestaff physicians on medical socioeconomics, and that this information was presented to the Deans and Program Directors in the state.

During the past year, the Section has been represented at meetings of the KMA Board of Trustees, has had voting Delegates attend meetings of both the KMA and AMA House of Delegates, and has had members serve on more than 20 committees of the Association. For the first time last year, a resident physician, Anne Winterland, MD, was named to a KMA Reference Committee.

On behalf of the members of the KMA-RPS Governing Council, I would like to thank the House of Delegates and individual members of KMA for their continued support and for giving residents the opportunity to have direct input in issues affecting the future of our profession.

Warren M. Cox, IV, MD  
KMA-RPS President

END OF CONSENT CALENDAR ITEMS

### Report of the Committee on Constitution and Bylaws

The Committee on Constitution and Bylaws met in order to consider a proposal for modifying the Student Members section of the KMA Bylaws.

The proposal had previously been recommended by the KMA Medical Student Section and the KMA Executive Committee, and the revisions are hereinafter set forth for your consideration as Recommendation 1.

Robert L. McClendon, MD  
Chairman

#### RECOMMENDATION:

(Note: The following is set forth in legislative amendment format with the new proposal being underscored and the language to be deleted set off by brackets and accented by diagonals through the wording.)

#### 1. CHAPTER I. MEMBERSHIP

##### Section 2.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in an accredited medical school in the United States shall be eligible for membership in the Medical Student Section of the Kentucky Medical Association. This Medical Student Section shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with [those] the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. [In order to insure the absence of any such conflict, the initial Constitution and Bylaws of the Student Section, as well as any later amendments thereto, shall be given prior approval by a majority of all Delegates present at the Annual Meeting of the KMA House of Delegates.] Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. [Individual students may apply directly to the State Association for membership and be assigned to the county society of their choice.] The determination of such membership shall be coincident with the academic [year of the institution in which the student is enrolled] enrollment of the student. Student members may not hold office in the State Association, but may be voting members of any State Association committee to which they are appointed. Student members may, however,

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hold office within the Student Section in accord with the provisions of that Section's Constitution and By-laws. The Student Section will be represented in the KMA House of Delegates through one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Kentucky College of Medicine, and one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Louisville School of Medicine.

### **Recommendations, Reference Committee No. 6:**

Reference Committee No. 6 considered the Report of the Committee on Constitution and Bylaws and recommends that it be adopted.

#### **Resolution M Resident Physician Section Resident On Call Schedules**

WHEREAS, the primary focus of postgraduate medical residency programs is quality patient care and enhanced medical education, and

WHEREAS, the number of hours residents are on call varies, and

WHEREAS, there is some indication that the number of hours and intensity of responsibilities required by some residency programs may reduce both the quality of care rendered and the educational experience of the resident, now therefore be it

RESOLVED, that the Kentucky Medical Association study the issue of hours on call by resident physicians in Kentucky and its impact on quality patient care and resident physician education.

### **Recommendations, Reference Committee No. 6:**

The Committee next discussed Resolution M, Resident On Call Schedules, submitted by the Resident Physicians Section of KMA. Reference Committee No. 6 recommends that Resolution M be referred to the KMA Board of Trustees.

#### **Resolution O University of Kentucky Medical Student Section Study of Rural Kentucky Medical Scholarship Fund**

WHEREAS, the Rural Kentucky Medical Scholarship Fund (RKMSF) has been beneficial to medical students and the general public for many years and has been recognized as a pioneer in the area of student loan programs, and

WHEREAS, the number of students using the Rural Kentucky Medical Scholarship Fund is decreasing annually, and

WHEREAS, reasons given by medical students in Kentucky for not seeking aid from the Fund indicate that certain stipulations in the loan agreement are unreasonable, and

WHEREAS, the costs of medical school tuition and fees are rising and the availability of financial aid funds is most important to medical students in Kentucky, and

WHEREAS, there are still many counties in Kentucky considered in "critical need" of physicians, now therefore be it

RESOLVED, that the Board of Directors of the Rural Kentucky Medical Scholarship Fund be requested to study the concerns of today's medical students as they relate to stipulations in the loan agreement regarding uncertainty of the choice of residency allowed, uncertainty of practice location required, and loans which are insufficient to cover tuition and fees, and be it further

RESOLVED, that the RKMSF Board be requested to invite one RKMSF loan recipient from each Kentucky medical school to participate in that study.

### **Recommendations, Reference Committee No. 6:**

Reference Committee No. 6 next considered Resolution O, Study of the Rural Kentucky Medical Scholarship Fund, submitted by the University of Kentucky Medical Student Section, and recommends that it be adopted.

#### **Resolution P Fayette County Medical Society KMA Offices**

RESOLVED, that the KMA Constitution and Bylaws Committee be charged with developing a system whereby there will be at least two nominees for Delegates and Alternate Delegates to the AMA and KMA Officers, with the exception of Trustees and their Alternates.

### **Recommendations, Reference Committee No. 6:**

The Committee discussed Resolution P, KMA Offices, submitted by the Fayette County Medical Society. It is recommended that the following substitute wording be adopted in place of the existing Resolved:

**"RESOLVED, that an Ad Hoc Committee be appointed to study the system whereby nominees for KMA Officers and Delegates are chosen."**

Reference Committee No. 6 recommends that Substitute Resolution P be adopted.



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Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 6 as a whole.

Mr. Speaker, I would like to personally thank the members of the Reference Committee for their interest, time, and help on the issues discussed and formulation of this report. Members of the Committee were: Susan Berberich, MD, Louisville; Thomas E. Bunnell, MD, Ft. Mitchell; Thomas C. Dedman, MD, Harrodsburg; and John R. Potter, MD, Ashland. I would also like to thank Diane Maxey for her assistance in preparing this report.

### REFERENCE COMMITTEE NO. 6:

**James R. Cundiff, MD, Shepherdsville, Chairman**  
**Susan M. Berberich, MD, Louisville**  
**Thomas E. Bunnell, MD, Ft. Mitchell**  
**Thomas C. Dedman, MD, Harrodsburg**  
**John R. Potter, MD, Ashland**

### Election of Officers

Alvin M. Churney, MD, Louisville, Chairman of the Nominating Committee, presented the slate of nominees for general Officers and for AMA Delegates and Alternates, and each was elected by acclamation.

President-Elect	Bob M. DeWeese, MD Louisville
Vice President	Nelson B. Rue, MD Bowling Green
Secretary-Treasurer	S. Randolph Scheen, MD Louisville
Delegate to the AMA (January 1, 1988 to December 31, 1989)	Fred C. Rainey, MD Elizabethtown
Delegate to the AMA (January 1, 1988 to December 31, 1989)	Donald C. Barton, MD Corbin
Alternate Delegate to the AMA (January 1, 1988 to December 31, 1989)	Wally O. Montgomery, MD Paducah
Alternate Delegate to the AMA (January 1, 1988 to December 31, 1989)	Harold L. Bushey, MD Barbourville

Doctor Churney then submitted the following nomina-

tions for the offices of Trustee and Alternate Trustee on behalf of the District nominating committees:

5th District Trustee	Larry P. Griffin, MD Louisville
5th District Alternate	Gorden T. McMurry, MD Louisville
6th District Trustee	Jerry W. Martin, MD Bowling Green
6th District Alternate	Jerry L. Gibbs, MD Glasgow
8th District Trustee	William B. Monnig, MD Edgewood
8th District Alternate	Mark F. Pelstring, MD Covington
11th District Trustee	William H. Mitchell, MD Richmond
11th District Alternate	John M. Johnstone, MD Richmond
15th District Trustee	Emanuel H. Rader, MD Pineville
15th District Alternate	Paul R. Smith, MD, London

Don E. Cloys, MD, Richmond, was recognized, and in accordance with the KMA Bylaws, submitted from the floor the name of Charles H. Veurink, MD, Richmond, as a nominee for Trustee of the 11th District. Voting was conducted by secret ballot, and the slate as listed above was elected.

(Following the election, Nelson B. Rue, MD, Chairman of the Board, reported that a complaint had been registered regarding the election of the 11th District Trustee, and that the matter would be investigated by the Board of Trustees.)

The new President-Elect was escorted to the podium by past Presidents Delmas M. Clardy, MD, and Paul J. Parks, MD.

### Election of 1988 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the 1988 KMA Nominating Committee:

Scott B. Scutchfield, MD, Danville  
R. Gary Marquardt, MD, Murray  
Terrell D. Mays, MD, Elizabethtown  
William H. Mitchell, MD, Richmond  
Susan H. Prasher, MD, Ashland

Doctor Campbell adjourned the 1987 Session of the KMA House of Delegates at 9:15 PM.

# 1987 CONSTITUTION AND BYLAWS OF THE KENTUCKY MEDICAL ASSOCIATION

## CONSTITUTION

Article I.	Name of the Association
Article II.	Purpose of the Association
Article III.	Component Societies
Article IV.	Composition and Meetings of the Association
Article V.	Officers
Article VI.	House of Delegates
Article VII.	Districts, Sections and District Societies
Article VIII.	Board of Trustees
Article IX.	Funds and Expenses
Article X.	Referendum
Article XI.	The Seal
Article XII.	Amendments
Article XIII.	Definitions

### Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

### Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

### Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

### Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

### Article V. Officers

**Section 1.** The officers of this Association shall be a President, a President-Elect, a Vice-President, a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

**Section 2.** The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

**Section 3.** All officers shall serve until their successors have been elected and installed.

**Section 4.** All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

### Article VI. House of Delegates

**Section 1.** The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out

the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session, annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

**Section 2.** Delegates shall be members of and elected by component county societies in such a manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. All other Past Presidents and Vice-Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote.

**Section 3.** The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

**Section 4.** The House of Delegates shall be the final judge as to the qualification of its members.

### Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

### Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

### Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

### Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary-Treasurer, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary-Treasurer to the President and Board of Trustees.



## Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

## Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

## Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

## BYLAWS

Chapter I.	Membership
Chapter II.	Annual and Special Meetings of the Association
Chapter III.	The House of Delegates
Chapter IV.	Election of Officers
Chapter V.	Duties of Officers
Chapter VI.	Board of Trustees
Chapter VII.	Discipline-The Judicial Council
Chapter VIII.	Standing Committees and Councils
Chapter IX.	Assessments and Expenditures
Chapter X.	Rules of Conduct
Chapter XI.	Rules of Order
Chapter XII.	County Societies
Chapter XIII.	Amendments

## CHAPTER I. MEMBERSHIP

**Section 1.** Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

**Section 2.** Membership in the Association shall be divided into nine classes, to-wit: Active, Life, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) **Active Members.** The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional

standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) **Life Members.** Component societies may elect as a life-member any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Life members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) **Resident Physicians Section.** Doctors of medicine or osteopathy who have complied with all pertinent regulations of the Kentucky Board of Medical Licensure and who are serving in AMA approved training programs in Kentucky shall be eligible for membership in the Resident Physicians Section of the Kentucky Medical Association. The Resident Physicians Section shall be governed by its own Constitution and Bylaws, which shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. In-Training members in good standing shall have the right to vote and receive all publications of the Association. In-Training members shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates. The Resident Physicians Section will be represented in the KMA House of Delegates by one voting representative elected by the Governing Council of the Resident Physicians Section.

(d) **Associate Members.** The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.

(2) Dentists may be invited to become Associate members.

(3) Physicians residing and/or practicing in communities bordering Kentucky who are active members of their home state and county society and who wish to become members of KMA on an other than active basis may become Associate Members.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

(e) **Inactive Members.** The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

(f) **Student Members.** Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in an accredited medical school in the United States shall be eligible for membership in the Medical Student Section of the Kentucky Medical Association. This Medical Student Section shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. Membership shall be coincident with the academic enrollment of the student. Student members may not hold office in the State Association, but may be voting members of any State Association committee to which they are appointed. Student



members may, however, hold office within the Student Section in accord with the provisions of that Section's Constitution and Bylaws. The Student Section will be represented in the KMA House of Delegates through one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Kentucky College of Medicine, and one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Louisville School of Medicine.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Association membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

**Section 3.** Hospital Medical Staff Section. There shall be a special section for hospital medical staff physicians who already hold membership in KMA. The Hospital Medical Staff Section (HMSS) shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. The Hospital Medical Staff Section shall elect a Delegate and Alternate Delegate to the KMA House of Delegates. The Delegate to the KMA House of Delegates, or his Alternate as the case may be, shall be a voting member of the House and may present resolutions on behalf of the HMSS.

**Section 4.** Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

**Section 5.** No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

## CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

**Section 1.** The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

**Section 2.** The Annual Meeting shall consist of one or more

scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

**Section 3.** The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

**Section 4.** Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

## CHAPTER III. THE HOUSE OF DELEGATES

**Section 1.** The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

**Section 2.** The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

**Section 3.** When a special session is called, the Secretary-Treasurer shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

**Section 4.** The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

**Section 5.** The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

**Section 6.** In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

**Section 7.** Forty per cent of the qualified delegates, as defined by Article VI of the constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

**Section 8.** Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately after the resolution has been introduced, it shall be referred to the proper Reference Committee before action thereon is taken.

**Section 9.** No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member



of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

**Section 10.** The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

**Section 11.** It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

**Section 12.** It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

**Section 13.** It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

**Section 14.** It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

**Section 15.** It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

**Section 16.** The state shall be divided into the following districts:  
No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviss, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

**Section 17.** It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

**Section 18.** It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

**Section 19.** A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

#### CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

**Section 1.** The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years with the provision that no more than one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

**Section 2.** During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

**Section 3.** The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

**Section 4.** All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

**Section 5.** Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

**Section 6.** The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the



Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

#### **CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES**

**Section 1.** Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

**Section 2.** The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of delegates and shall be installed as President of the Association at its next regular session.

**Section 3.** The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice-President shall succeed to the office of the President.

**Section 4.** The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

**Section 5.** The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

**Section 6.** The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

**Section 7.** The Secretary-Treasurer shall advise the Executive Vice President in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Vice President or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

#### **CHAPTER VI. BOARD OF TRUSTEES**

**Section 1.** The Board of Trustees shall be the executive body of

the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates and Alternate Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two Trustees to be elected annually by the Board of Trustees. A majority of the full Board, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

**Section 2.** The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

**Section 3.** Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

**Section 4.** The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

**Section 5.** The *Journal of the Kentucky Medical Association* shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the *Journal* shall be elected by the Board. All money received by the *Journal* or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

**Section 6.** All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

**Section 7.** In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In the case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

**Section 8.** The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

**Section 9.** The Board shall employ an Executive Vice President whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Vice President shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other rep-



representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

## CHAPTER VII. DISCIPLINE—THE JUDICIAL COUNCIL

**Section 1.** There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or a Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

**Section 2.** The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the

opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Medical Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

**Section 3.** It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In this case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

**Section 4.** The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

**Section 5.** Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

**Section 6.** Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

**Section 7.** The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

**Section 8.** District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense



of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recommendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

**Section 9.** Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

**Section 10.** No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judicial Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

#### **CHAPTER VIII. COMMITTEES AND COMMISSIONS**

**Section 1.** The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

**Section 2.** The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

**Section 3.** The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

**Section 4.** No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

#### **CHAPTER IX. ASSESSMENTS AND EXPENDITURES**

**Section 1.** The annual dues for membership in this Association shall be as follows: (1) Active Member, \$400, (except those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay \$200 their first full year of membership); (2) Life Members, no dues; (3) Associate Members, \$75; (4) In-training Members, \$30, except that in-training members shall not be liable for dues during the first six months of their first postgraduate year in an approved residency program in Kentucky; (5) Inactive Members, \$50; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be prorated on a quarterly basis as determined by the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments, together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary-Treasurer of this Association as of the first day of January each year.

**Section 2.** Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

**Section 3.** All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary

for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

#### **CHAPTER X. RULES OF CONDUCT**

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

#### **CHAPTER XI. RULES OF ORDER**

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

#### **CHAPTER XII. COUNTY SOCIETIES**

**Section 1.** Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to evoke the charter of any component society whose actions are in conflict with the letter or spirit of the Constitution and Bylaws.

**Section 2.** As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

**Section 3.** Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

**Section 4.** In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolution, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 11 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

A multi-county component society may be disaggregated so that an individual county society may regain independent status when a majority of the members in that county indicate their desire to reorganize. At that time the members from the withdrawing county shall forward a petition containing the signatures of a majority of the members in that county to be validated by KMA. The withdrawing county shall further forward a resolution to the KMA Headquarters Office to be submitted to the House of Delegates at its next regular meeting, requesting recognition as a county society and issuance of a charter, in accord with Chapter XII, Section 1 of the KMA Bylaws. Once this charter is issued, the new county society shall become a recognized entity at the beginning of the following KMA dues year and those counties remaining with the original multi-county unit may continue to function under their pre-existing charter.

**Section 5.** Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these



Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

**Section 6.** Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

**Section 7.** When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

**Section 8.** A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

**Section 9.** Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

**Section 10.** Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

**Section 11.** At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

**Section 12.** The secretary of each component society shall keep a roster of its members and a list of nonaffiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

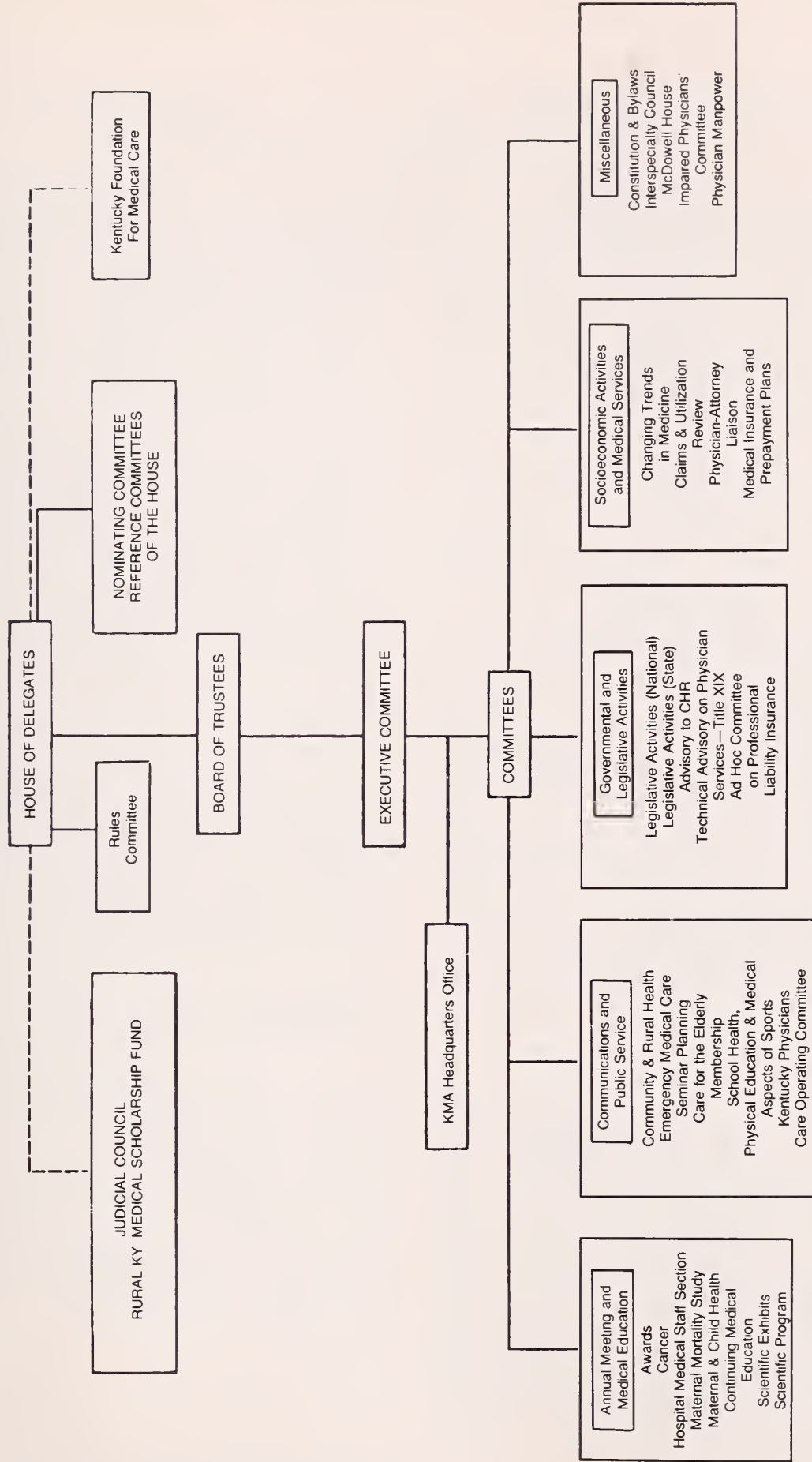
### CHAPTER XIII. AMENDMENTS

**Section 1.** These bylaws may be amended at any session of the House of Delegates by a majority vote of the Delegates present at a meeting of that session, provided: (1) the amendment proposed is presented in writing to the Delegates thirty days prior to the meeting, or (2) the amendment is introduced in writing at a regular meeting of the House of Delegates during the session and considered at the following meeting of the session, the vote on said amendment having been postponed definitely for a period of at least one day.

**Section 2.** An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final meeting of a session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

**Section 3.** An amendment to these bylaws may be proposed in writing by an individual Delegate at the final meeting of a session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final meeting is adjourned. Such an amendment, having not been postponed definitely for a period of one day, requires a two-thirds vote.

KMA Organization Chart—Revised September 1987





# 1987-88 KMA Committees

## Scientific Program Committee

James A. Baumgarten, MD, Louisville, Chairman  
Donald C. Barton, MD, Corbin  
James R. Cundiff, MD, Shepherdsville  
Bob M. DeWeese, MD, Louisville  
Bill H. Harris, MD, Lexington  
H. Mac Vandiviere, MD, Lexington  
Sonia J. Teller, MD, Louisville  
Peter L. Thurman, MD, Louisville  
Thomas C. Stine, MD, Highland Heights

## Scientific Exhibits Committee

Richard A. Kielar, MD, Lexington, Chairman  
James P. Moss, MD, Louisville  
John W. Ratliff, MD, Lebanon  
Sibu Saha, MD, Lexington

## Awards Committee

S. Randolph Scheen, MD, Louisville, Chairman  
Ballard W. Cassady, MD, Pikeville  
Delmas M. Clardy, MD, Hopkinsville  
Carl Cooper, Jr, MD, Bedford  
John C. Quertermous, MD, Murray

## Continuing Medical Education Committee

James E. Redmon, Jr, MD, Louisville, Chairman  
John V. Borders, MD, Lexington  
Charles M. Brohm, MD, Louisville  
Michael E. Daugherty, MD, Lexington  
Brooks Horsley, MD, Madisonville  
John M. Johnstone, MD, Richmond  
James A. Parrott, MD, Hopkinsville  
Bruce M. Stapleton, MD, Ashland  
Alfred L. Thompson, Jr, MD, Louisville  
Craig DeWeese, Louisville (student)

Ex-Officio:

Constance Fulmer, PhD, Lexington  
KHA Representative

## Council for Continuing Medical Education

James A. Baumgarten, MD, Louisville, Chairman  
Keith H. Crawford, MD, Paducah  
Stuart Fink, MD, Louisville  
Hiram C. Polk, Jr, MD, Louisville  
Theresa M. Richter, MD, Fort Mitchell  
Joseph E. Roe, MD, Madisonville  
Charles R. Sachatello, MD, Lexington  
Paul J. Sides, MD, Lancaster  
Sam H. Traughber, MD, Hopkinsville  
Nnamdi Davis, Louisville (student)  
Keith Morrison, Lexington (student)

## Cancer Committee

P. Raphael Caffrey, MD, Lexington, Chairman  
Harry E. Altman, MD, Pikeville  
Bobby C. Baker, MD, Ashland  
Jerry B. Buchanan, MD, Louisville  
Harry W. Carloss, MD, Paducah  
Clinton C. Cook, III, MD, Louisville  
John D. Cronin, MD, Lexington  
Thomas G. Day, Jr, MD, Louisville  
Gilbert H. Friedell, MD, Lexington  
Carl O. Knutson, MD, Louisville  
Walter J. Kuebler, II, MD, Bowling Green  
William R. Meeker, MD, Lexington  
Carol S. Milburn, MD, Crestview Hills  
Condict Moore, MD, Louisville  
Glenn I. Moore, MD, Lexington  
Dattatraya S. Prajapati, MD, Owensboro  
Elie P. Saikaly, MD, Madisonville  
Anne Winterland, MD, Louisville (resident)  
Robert Hiltz, Louisville (student)  
Joe Bowers, Lexington (student)

Ex-Officio:

Wayne B. Miller, Louisville

## Emergency Medical Care Seminar Planning Committee

E. Truman Mays, MD, Somerset, Chairman  
James L. Combs, MD, Covington  
Diller B. Groff, MD, Louisville  
Charles B. Spalding, MD, Bardstown  
Donald M. Thomas, MD, Louisville  
Barbara Cox, Louisville (Auxiliary)

Ex-Officio:

Tommy Thompson, Frankfort, CHR  
Cheryl Westbay, RN, Louisville, CEN

## Physician Manpower Committee

Robert R. Goodin, MD, Louisville, Chairman  
John D. Gover, MD, Bowling Green  
Donald R. Kmetz, MD, Louisville  
Gorden T. McMurry, MD, Louisville  
William Mitchell, MD, Richmond  
Mark F. Pelstring, MD, Covington  
Emery A. Wilson, MD, Lexington  
Todd Pesavento, Louisville (student)  
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## Health and Safety Tip From the American Medical Association

### MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its *Manual on Alcoholism* points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.
2. Drinking to handle problems or relieve symptoms.
3. Obvious preoccupation with alcohol and the frequent need to have a drink.
4. Surreptitious drinking or gulping of drinks.
5. Tendency toward making alibis and weak excuses for drinking.
6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.
7. Frequent absenteeism from the job, especially following weekends and holidays.
8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.
9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.
10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.
11. Multiple contacts with the health care system with disorders that are alcohol caused or related.
12. Persistent marital and family problems, perhaps with multiple marriages.
13. History of arrests for drunkenness or drunken driving.

*Submitted by the KMA Impaired Physicians' Committee*

**Mark Your Calendar to Attend the  
KMA Annual Meeting  
“What’s New in Cancer Therapy”  
September 26-29, 1988  
Hyatt Regency Lexington  
Lexington, Kentucky**





# A WORD TO THE WHYS

## WHY AMA?

The AMA helps maintain high standards in Continuing Medical Education through its participation in the Accreditation Council for Continuing Medical Education (ACCME). The AMA also helps reduce the high cost of CME by offering 28 Video Clinic study courses for CME credit. Upholding CME standards and providing cost-effective CME alternatives: it's one more good reason why you should be a part of the AMA.

## WHY AMA?

The AMA provides a democratic forum where you, along with your colleagues across the country, can raise and argue issues, reach a consensus and formulate policy. AMA policy is then translated into practical actions on issues that affect you and your practice. Making sure medicine stays active, strong and united: it's one more good reason why you should be a part of the AMA.

## WHY AMA?

The AMA has taken an important initiative in combating prescription drug abuse. An informal steering committee organized by the AMA has developed a data analysis system that would help states detect sources of prescription drug diversion. Cracking down on prescription drug abuse: it's one more good reason why you should be part of the AMA.

**To Join,** Contact your county or state medical society or write:  
Division of Membership, AMA, 535 North Dearborn Street, Chicago,  
Illinois 60610 or call collect, (312) 751-6196.



In acute and chronic edema due to CHF

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- **Predictable dose response<sup>4</sup>**
- **Diuresis completed hours faster than with furosemide after oral dosing<sup>5</sup>**
- **Better GI absorption<sup>6,7</sup>**
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**WARNING:** Bumex (bumetanide/Roche) is a potent diuretic which, if given in excessive amounts, can lead to a profound diuresis with water and electrolyte depletion. Therefore, careful medical supervision is required, and dose and dosage schedule have to be adjusted to the individual patient's needs. (See under DOSAGE AND ADMINISTRATION in complete product information.)

**INDICATIONS AND USAGE:** Edema associated with congestive heart failure, hepatic and renal disease, including the nephrotic syndrome.

Almost equal diuretic response occurs after oral and parenteral administration of Bumex. If impaired gastrointestinal absorption is suspected or oral administration is not practical, Bumex should be given by the intramuscular or intravenous route.

Successful treatment with Bumex following instances of allergic reactions to furosemide suggests a lack of cross-sensitivity.

**CONTRAINDICATIONS:** Anuria. Hypersensitivity and in patients in hepatic coma or in states of severe electrolyte depletion. Although Bumex can be used to induce diuresis in renal insufficiency, any marked increase in blood urea nitrogen or creatinine, or the development of oliguria during therapy of patients with progressive renal disease, is an indication for discontinuation of treatment.

**WARNINGS:** Dose should be adjusted to patient's needs. Excessive doses or too frequent administration can lead to profound water loss, electrolyte depletion, dehydration, reduction in blood volume and circulatory collapse with the possibility of vascular thrombosis and embolism, particularly in elderly patients.

Prevention of hypokalemia requires particular attention in patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis and ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, certain diarrheal states, or other states where hypokalemia is thought to represent particular added risk to the patients.

In patients with hepatic cirrhosis and ascites, sudden alterations of electrolyte balance may precipitate hepatic encephalopathy and coma. Treatment in such patients is best initiated in the hospital with small doses and careful monitoring of the patient's clinical status and electrolyte balance. Supplemental potassium and/or spironolactone may prevent hypokalemia and metabolic alkalosis in these patients. In cats, dogs and guinea pigs, Bumex has been shown to produce ototoxicity. Since Bumex is about 40 to 60 times as potent as furosemide, it is anticipated that blood levels necessary to produce ototoxicity will rarely be achieved. The potential for ototoxicity increases with intravenous therapy, especially at high doses.

Patients allergic to sulfonamides may show hypersensitivity to Bumex.

**PRECAUTIONS:** Measure serum potassium periodically and add potassium supplements or potassium-sparing diuretics, if necessary. Periodic determinations of other electrolytes are advised in patients treated with high doses or for prolonged periods, particularly in those on low salt diets.

Hyperurcemia may occur. Reversible elevations of the BUN and creatinine may occur, especially with dehydration and in patients with renal insufficiency. Bumex may increase urinary calcium excretion. Possibility of effect on glucose metabolism exists. Periodic determinations of blood sugar should be done, particularly in patients with diabetes or suspected latent diabetes. Patients should be observed regularly for possible occurrence of blood dyscrasias, liver damage or idiosyncratic reactions.

Especially in presence of impaired renal function, use of parenterally administered Bumex should be avoided in patients to whom aminoglycoside antibiotics are also being given, except in life-threatening conditions.

Drugs with nephrotoxic potential and bumetanide should not be administered simultaneously. Since lithium reduces renal clearance and adds a high risk of lithium toxicity, it should not be given with diuretics.

Probenecid should not be administered concurrently with Bumex.

Concurrent therapy with indomethacin not recommended.

Bumex may potentiate the effects of antihypertensive drugs, necessitating reduction in dosage.

Interaction studies in humans have shown no effect on digoxin blood levels.

Interaction studies in humans have shown Bumex to have no effect on warfarin metabolism or on plasma prothrombin activity.

**Pregnancy:** Bumex should be given to a pregnant woman only if the potential benefit justifies the potential risk to the fetus.

Bumetanide may be excreted in breast milk.

**Pediatric Use:** Safety and effectiveness below age 18 not established.

**ADVERSE REACTIONS:** Muscle cramps, dizziness, hypotension, headache and nausea, and encephalopathy (in patients with preexisting liver disease).

Less frequent clinical adverse reactions are weakness, impaired hearing, rash, pruritus, hives, electrocardiogram changes, abdominal pain, arthritic pain, musculoskeletal pain and vomiting. Other clinical adverse reactions are vertigo, chest pain, ear discomfort, fatigue, dehydration, sweating, hyperventilation, dry mouth, upset stomach, renal failure, asterixis, itching, nipple tenderness, diarrhea, premature ejaculation and difficulty maintaining an erection.

Laboratory abnormalities reported are hyperurcemia, azotemia, hyperglycemia, increased serum creatinine, hypokalemia, hyponatremia, and variations in CO<sub>2</sub> content, bicarbonate, phosphorus and calcium. Although manifestations of the pharmacologic action of Bumex, these conditions may become more pronounced by intensive therapy. Diuresis induced by Bumex may also rarely be accompanied by changes in LDH, total serum bilirubin, serum proteins, SGOT, SGPT, alkaline phosphatase, cholesterol, creatinine clearance, deviations in hemoglobin, prothrombin time, hematocrit, platelet counts and differential counts. Increases in urinary glucose and urinary protein have also been seen.

#### **DOSAGE AND ADMINISTRATION**

**Oral Administration:** The usual total daily dosage is 0.5 to 2.0 mg and in most patients is given as a single dose.

**Parenteral Administration:** Administer to patients (IV or IM) with GI absorption problem or who cannot take oral. The usual initial dose is 0.5 to 1 mg given over 1 to 2 minutes. If insufficient response, a second or third dose may be given at 2 to 3 hour intervals up to a maximum of 10 mg a day.

**HOW SUPPLIED:** Tablets, 0.5 mg (light green), 1 mg (yellow) and 2 mg (peach), bottles of 100 and 500. Prescription Paks of 30. Tel-E-Dose® cartons of 100. Imprint on tablets: 0.5 mg—ROCHE BUMEX 2, 1 mg—ROCHE BUMEX 1, 2 mg—ROCHE BUMEX 2.

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